SL-II MC-683/1
Time: 0303 GOT, 15:05:03 GMT
6/8/73

PAO This is Skylab Control; Greenwich mean time 5 hours 3 minutes. The spacecraft is on its 354 revolution crossing over the country of India. The apparent problem in the coolant loop, the airlock module coolant loop, has been solved by a jury rigged method of attaching the liquid cooled garment near the hot water tank in the orbital workshop dome, and hooking the liquid cooled garment to the coolant loop system, thereby running hot water through the system and thereby raising the temperatures which were becoming a problem. The temperature had dropped to 2 degrees below freezing. The airlock module coolant loop is an active thermal coolant loop which removes and dissipates waste heat in the airlock module, due to the cluster equipment and operation and metabolic heat loss. The cooling - the coolant loop provides support to the extra vehicular activity system, the inter-vehicular suit activity, condensing heat exchangers, cabin heat exchangers, the tape recorders, cold plates, oxygen heat exchangers, the Apollo telescope mount control and display panel heat exchanger, battery modules and 6 electronic modules. The problem first arose at approximately 19:36 GMT after the EVA. The problem was apparently caused, due to the fact that the vehicle was almost totally powered down for the EVA. When the vehicle is powered down there is no heat being produced inside the vehicle, therefore the coolant loop system became extra cold. After the crew was bedded down for the evening at 10:00 p.m. central daylight time, within 45 minutes later, the crew was awakened and advised of procedure necessary to make adjustments to the coolant loop system. When the spacecraft passed over Honeysuckle on the last revolution at 03:47 GMT, the crew was advised of the systems necessary to repair, make modifications to the coolant loop. When the spacecraft passed over Canary Island station at GMT 04:36 these procedures were initiated and within a few moments the temperatures in the coolant loop system rose from 2 degrees below freezing, rose approximately 10 degrees bringing the system back to nominal. The coolant loop is still being operated with the liquid cooled garment until the Skylab crosses over Carnarvon in approximately 8 minutes. Further instructions will be passed to the crew as to whether that will be the extent of the operation and the crew can return to bed for the evening. At Greenwich mean time 5 hours 6 minutes, this is Skylab Control.

END OF TAPE

SL-II MC684/1
Time: 00:14 CDT, 15:05:14 GMT
6/8/73

PAO This is Skylab Control; Greenwich mean time 5 hours 21 minutes. There was a mechanical mixup in the soundroom. There was 2 minutes which we recorded on VOX tape at the beginning of this pass. We'll play that now and pick up any additional air to ground conversation between CAP COM Hank Hartsfield and the crew. We'll play that tape now.

CC Skylab, Houston; through Carnarvor at Honeysuckle for about 14 minutes.

SC Roger. How are you.

CC Okay. I guess we made a decision here. What we're going to do is leave this thing latched up like it is. I think we're out of the woods right now on it for the time being anyhow. And we're going to work on a plan to get ourselves squared away for the rest of the mission. Before you guys go to bed, however, we'd like to know how we're going to handle tomorrow. Our plans are now, tentative with your concurrences, to get you up about 13:00 about 2 hours late and we'd like to know how much cleanup time you want in the plan tomorrow and where you want it.

CC And that cleanup will probably include tying down this thing we just built up here with the FCG.

SC Well, Hank I tell you I better spread it out (squeal) couple of hours (squeal).

CC Okay. I had an awful lot of feedback there, Pete. I understand you want about a couple of hours a guy - is that correct?

SC Wait until we get the squeal out of it, Hank.

CC Okay, that sounds pretty good.

SC Okay. Couple hours would be fine or if you can't make it that way, you know, spread a little in tomorrow and a little the next day and we'd like to keep as much on the experiments as possible. It won't take us more than 30 minutes to cleanup -

SC We put it together in an awfu' lot of a hurry.

CC Roger, understand and one other little item for you here is one of our computer predictions says we may get a nominal H-cage on the next dump. One of them says we're not.

SC I understand that TACS is right down by our head. I'm sure we'll find out one way or another whether we got it or not? I'm kinda sitting here sight seeing right at the moment. We've got a beautiful swing down over Sumatra and Borneo. That light is - we're just approaching the Australian coast line ready for the pass over Australia. Read, Houston?

SL-II MC684/2
Time: 00:14 CDT, 15:05:14 GMT
6/8/73

CC Roger, we copy and I guess if - we're satisfied with the likes of it right now and if you are we'll let you go to bed. Do you want a call in the morning. We've got a pass at Ascension at 13:00.

SC Yeah, why don't you do that. I suspect we'll wake up before that, Hank. We usually do and we'll give you a holler. And if you haven't huard from us by 13:00 why just go ahead and give us a holler. And all my good buddies down there in the Carnarvon Tracking Station when they get off duty tonight they ought to all go and have a quiet lager beer for me.

CC Roger, copy. I appreciate you guys taking care of this super fast and sorry we had to do that to you. I hope you get a good nights' rest and we'll talk to you tomorrow.

SC Okay. Nighty night.

PAO LOS. This is Skylab Control; Greenwich mean time 5 hours 32 minutes with loss of signal over the Honeysuckle Tracking Station as the spacecraft nears the end of the 355th revolution. The crew has been bid good night for the second time after troubleshooting the coolant loop problem. The ground has told them to leave it up the way it was with the liquid cooled garment hooked up to a hot water tank, laid over a hot water tank, and then the liquid cooled garment hooked to the coolant loop which, as a result, raised the temperature in the coolant loop to nominal operation temperatures. The crew has been given the green light for two extra hours sleep in the morning. Scheduled arising time now is 8 a.m. central daylight time. This concludes the reports from the Mission Control Center from the Public Affairs Console. Next report will be at wakeup time, 3 a.m. central daylight time, Friday, June 8. At Greenwich mean time 5 hours 33 minutes this is Skylab Control.

END OF TAPE

SL-II MC-685/1
Time: 01:25 CDT, 15:06:25 GMT
6/8/73

PAO This is Skylab Control at 6 hours 25 minutes Greenwich mean time. At the present time the process of handover is taking place at Mission Control. Flight Director Neil Hutchinson, who is off-going, is handing over to Charles Lewis, the on-coming flight director. We expect a change-of-shift briefing to take place at approximately 35 minutes after 1:00 o'clock central daylight time. To repeat, that's 1:35 central daylight time. Flight Director Neil Hutchinson and his electrical, general instrumentation, and life support systems engineer, the EGIL, will be there to answer questions on the suit umbilical system problem that occurred tonight, the coolant loop problem, and also to discuss the electrical power generation on Skylab. This is Skylab Control at 25 minutes and 50 seconds after the hour.

END OF TAPE

SL-II MC-686/1
Time: 01:41 CDT, 15:06:41 GMT
6/8/73

PAO This is Skylab Control at 6 hours 41 minutes and 15 seconds Greenwich mean time. At the present time Flight Director, Neil Hutchinson, is completing his turnover to Charles Lewis. He informs me there will be about a 10-minute additional delay before the press conference can begin. That would put the press conference at approximately 5 minutes before 2:00 o'clock central daylight time. We've got some additional information from the off-going EGIL, Steve McLendon, who also will be available at the press conference on the details of the temperature control problem experienced today by the crew. The problem began during the beginning of the EVA, when a switch was turned to the EVA position on the primary coolant loop. The switch was enabled to EVA position in order to run coolant liquid through the suit system, through the liquid cooled garment that cools the astronauts while they're working within their suits. In that EVA position, as soon as they made the switch they received a caution and warning light, which signaled low temperature. It's believed that when they made that switch, that a slug of cold material, Coolanol, the coolant material that runs through the cooolant loops came from the radiators and went into that bypass vent into the valve that operates the cooling operation. It's called the temperature control valve-B, TCVB, Temperature Control Valve-B. Temperature Control Valve-B may have been thermally shocked by that cold material coming out of the radiators of the spacecraft. The radiators being at very cold temperatures, and that is where the heat is exchanged and dumped into space. It's quite possible that that temperature control valve was shocked into the cold position so that only cold material would run through it. And it would continue to put all of the material in the Coolanol System out to the radiator to cool it down. As soon as that happened they instructed the crew to go back out of the EVA position. When they did that they received a high pitch whine on one of the coolant pumps. And because of the high-pitch whine they though there may be some danger of that pump going out. They weren't really certain what was the problem. And they still are not. They switched back to the EVA position on the primary coolant loop and at that time switched to the secondary coolant loop and shutdown the primary loop. So that primary loop which became very cold at that time, because of the stuck valve, is still at a rather moderate temperature. There's not any danger from it. And they will tomorrow morning attempt to free that stuck valve. They don't consider that to be much of a problem. The way it will be - probably be freed is by bypassing the radiator. They have a control that allows them to telemeter up signals to bypass the radiator system on the primary coolant loop. When they bypass that radiator system,

SL-II MC-686/2
Time: 01:41 CDT, 15:06:41 GMT
6/8/73

they will only flow the coolant loop around the spacecraft. And that will continually warm up. They feel that once the temperatures have come up enough in the coolant loop, it is at a moderate temperature right now. It is in fact above the temperature of the secondary coolant loop. Once the temperatures have come up and are brought to a sufficient level, that temperature control valve-B will be freed again, and it will start operating, and again control the temperatures properly, flowing some of the material out to the radiators but not excessive amounts. So the problem began during the EVA on the primary coolant loop. It has been shutdown since the beginning of the EVA and it has not been operating. It is still capable of operating properly once that temperature control valve is freed. Temperature Control Valve-B is the main control for the electronic systems temperature. It's the means of regulating the amount of coolant that flows out to the radiators. The temperature problem is now considered pretty much solved, or at least for the overnight period. They have the liquid cooled garment, that's the space suit cooling apparatus attached to the suit coolant loop. That's part of the coolant system. This is essentially in the EVA mode on that secondary coolant loop. And as long as that's attached it is bringing up the temperatures. The temperatures are coming up now well in the safe range. And they're well above any danger of freezing. So the problem is considered to be solved with this fix. And they don't expect it to be an additional problem. The problem on the secondary coolant loop, as should be explained, was brought about because of the coolant loop. The primary coolant loop had brought about very cold temperatures. The secondary coolant loop and the primary coolant are very closely entertwined with each other. And the cold temperatures on the primary loop brought down the temperatures on the secondary loop during the EVA. So that, in fact, the secondary loop has no fails in it. It's operating properly. But the cold temperatures in the primary loop had brought down the temperatures in that secondary loop. They have now brought those back up within safe limits and it's assumed that they will operate within safe limits now after the evening. Once we've gotten them up to a high enough level, they should continue to operate at that level with out any additional fixing. So, tomorrow there will be an attempt to solve the problem on the primary loop by bypassing the radiators - bypassing the cold part of the system, and allowing it to heat up naturally from the electronics temperatures. The solar array which is now fully deployed on the Orbital Workshop is producing energy at high levels of the actual output of energy from the solar panel. There will be additional explanation for this necessary. But the output from the solar panel indicated

SL-II MC-686/3
Time: 01:41 CDT, 15:06:41 GMT
6/8/73

8000 watts and above, which is well within the range of its normal output. Now that energy is put into the batteries, they are drawing a regular power from the batteries of about 1700 watts. That's below their capability. For safety reasons they felt that it would be desirable to keep them down. They did have problems earlier on drawing too much power from ATM batteries and lost a battery because of that, or nearly lost a series of batteries because of that. So they are not drawing the full capability of those batteries. They are able right now to draw 1700 watts on a regular basis, both in darkness and in daylight, from the 8 large batteries in the orbital workshop. These are separate from the Apollo telescope mount solar array batteries, of which there are 18, 2-1/2 of them not working properly. That 1700 watts is below what they'll be drawing tomorrow. They expect to crank it up and draw 2500 watts out of it tomorrow. They're moving slowly but surely up to the maximum normal capability of those batteries, which is about 3000 watts. So at the present time they do get 1700 watts regularly from the batteries, something in excess of 8000 watts being produced by the solar array and being put into the batteries during the charging periods. So 1700 watts of output from the orbital workshop, in addition to something over 4000 watts out of the ATM. And they will tomorrow go up to 2500 watts in the orbital workshop and they have a maximum capability of 3000 watts, which will undoubtedly be brought up in future days. The power system looks excellent right now. The temperature problem is no longer a difficulty. We will be having a change of shift briefing in approximately 8 minutes at building 1, Johnson Space Center. That will include both the EGIL, the electrical general instrumentation and life support system engineer who is in charge of both electrical and coolant system problems. And it will include Neil Hutchinson, the off-going flight director. This is Skylab Control at 48 minutes and 12 seconds after the hour.

END OF TAPE

SL-II MC-687/1
Time: 01:59 CDT, 15:06:59 GMT
6/8/73

PAO - - shortage, and that is going on.

PAO This is Skylab Control at 6 hours 59 minutes and 35 seconds Greenwich mean time. At the present time Neil Hutchinson, the flight director, and Steve McLandon, the EGIL, on the off-going shift, are on their way to the Building 1 Briefing Room. There will be a press conference held shortly in Building 1, approximately 5 minutes from now. The crew will be waking up late tomorrow morning. They will be allowed to sleep in for an extended period of time to make up for the time they lost tonight because of the coolant problem. And so we will not have commentary as early in the morning as normal. This is Skylab Control at 6 seconds after the hour.

END OF TAPE

SL-II MC688/1
Time: 05:59 CDT, 15:10:59 GMT
6/8/73

PAO This is Skylab Control at 10 hours Greenwich mean time, here in Mission Control, correction 11 hours Greenwich mean time. And in Mission Control we're in the process of beginning a shift handover. Flight Director Chuck Lewis and the team that's been on during the night preparing to handover to the team headed by Flight Director Milton Windler. The actual change to occur at about 8 a.m. which is also the time that the crew is scheduled to be awakened this morning if we haven't heard from them first. The flight surgeon reports the crew got to sleep last night - actually early this morning at 12:30 and the decision has been made and was made last night to allow them to sleep essentially a full 8 hours with wakeup at 8 o'clock a.m. or 13:00 Greenwich. The thermal situation is stable at the present time. In the spacecraft the orbital workshop operating on the secondary coolant loop after the primary loop was switched out after a valve stuck OPEN flowing the full coolant load through the radiators and dropping the loop temperatures below acceptable limits. The secondary loop has remained stable during the night. Temperatures cycling between about 36 and 38 degrees Fahrenheit. This is cooler than desirable but is not considered critical at the moment. Major activities, scheduled in the Flight Plan during today, are the S073 Gegenschein/Zodiacal Light Experiment which is scheduled to be performed by Commander Pete Conrad. Science Pilot Joe Kerwin and Pilot Paul Weitz will be performing the Lower Body Negative Pressure and M171 experiments, both medical experiments. The M171 titled Metabolic Activity using the bicycle ergometer. At the present time we are in stateside acquisition, receiving telemetry data from the spacecraft through the Merritt Island Ground Station. And we have about 4-1/2 minutes remaining in that acquisition before losing radio contact again. This is Skylab Control at 11 hours 3 minutes.

END OF TAPE

SL-II MC-689/1
Time: 07:00 CDT, 15:12:00 GMT
6/8/73

PAO This is Skylab Control at 12 hours Greenwich mean time. Now about 1 hour away from the scheduled crew awakening time. Crew to be awakened at 8 a.m. central if we haven't heard from them prior to that time. They have been allowed to sleep in this morning after problems with the coolant loops on the workshop last night that kept them up until about 12:30. The coolant situation this morning is stable, situation has remained unchanged since our last report. We're operating on the secondary coolant loop and it's stable, temperature around 36 to 38 degrees, which Flight Director Chuck Lewis reported is acceptable, this is lower than desired, however. A short while ago the Flight Director requested all Flight Controllers to consider the availability now of additional electrical power and to get together the plans for things they would like to resume, activities that previously were curtailed, that they would now recommend resuming in light of the additional reserves of electrical power. The solar wing on the workshop which was deployed yesterday, is now putting out about 3000 watts of electrical power, which is about what we would expect for a single normally nominally functioning solar wing. At the present time Skylab is in radio acquisition through the tracking station at Honeysuckle Creek, Australia. We have about 3 minutes before we lose radio contact, and in another 10 minutes we'll be reacquiring at Hawaii. During this period of the day we have maximum contact through the ground tracking stations, maximum duration of stateside passes and that acquisition time gradually decreases through the day. The peak acquistion occurring early in the day as we're seeing now. There is no television scheduled to be brought into Houston, today. The preliminary flight plan for tomorrow shows the possibility of performing TV on M092, the lower body negative pressure. We're in the process of a shift hand over and that will begin in earnest during the next hour. We'll see a large number of flight controllers drifting into the control center ready to be debriefed on the nights activties, and to pick up the load for the day. Flight Director, as I mentioned, on this shift is Chuck Lewis, he'll me relieved by Milt Windler. And our CAP COM is astronaut Richard Truly, who is being relieved, it appears by the astronaut Bruce McCandless. Also we see astronaut Robert Crippen in the control center at the CAP COM console. At 12 hours 3 minutes Greenwich mean time, this is Skylab Control.

END OF TAPE

SL-II MC-690/1
Time: 07:26 CDT, 15:12:26 GMT
6/8/73

PAO This is Skylab Control; at 12 hours 26 minutes. We'll be reacquiring Skylab over the continental United States, in less than a minute. We don't expect to hear anything from the crew, and we don't expect to put in a call to them. However, as we approach the wake up time, we prefer to stand by live for any conversation that might develop. We will keep the air-to-ground line up during this stateside pass. During the pass over Hawaii, the environmental engineers got a good look at temperatures on the workshop. Report that the average temperatures at critical locations in the workshop, such as the film and the food compartments, are ranging between 73 and 78 degrees, which appears to be consistent with the sort of temperatures we were getting yesterday, also in the workshop. We have acquired signal now at Goldstone, and, as mentioned we will leave the lines up live during this stateside pass.

SC Good morning, Houston.

CC Morning, Skylab. How are y'all doing this morning?

SC Fine.

CC And Skylab, Houston, we're in the middle of an Ascension pass, we still have about 9 minutes remaining in this pass. We've hustled all evening to get out a bunch of pads which are in the teleprinter, which you may already have found. The only note I'll have right now on those pads is that there is a newssummary Flight Plan for today that assumes (stutic) 13:00 wake up that you'll find there. During the evening the coolant loop's status has remained stable, and we do not want you to change the configuration that you guys put it in last evening. One other short note - We are uplinking some ATMDC memory load in preparation for switchover to the secondary computer. We're going to be doing, - it's now scheduled for tomorrow, and there's a message on the teleprinter concerning this up-link we're doing now.

SC Yeah, we saw it, Dick, thank you.

CC Okay.

SC And we're just now getting up and about.

CC Very good.

SC Dick, how long do you think you're going to have to leave the SUS pump up and the coolant loop the way it is?

CC Pete, I wish we right now could give you a real smart answer on that, but we just honestly don't know, with the - The EGIL and his people have been studying the problem all night, and we've got the situation stable right now, and we'd like to just leave it that way until we really understand what we're doing now.

SL-II MC-690/2
Time: 07:26 CDT, 15:12:26 GMT
6/8/73

SC Okay.
SC Hey, Dick, do y'all want that housekeeping 70 the morning power down, still performed?
CC Negative, we do not. That's one of the messages that we have prepared, I'm not sure right now whether it's on board or not, but we do not want it performed. As a matter of fact not - -
SC (Garble)
CC As a matter of fact, now that I think about it, it's in the odds and ends message, and we have not up-linked that one yet, but do not do those steps.
SC Okay, we'll throw it away.
CC (Laugh) Okay.
CC Skylab, Houston. We're about 45 seconds from LOS here at [illegible]ion. We're going to see you at Carnarvon at 13:30.
SC Okay.

END OF TAPE

SL-II MC691/1
Time: 08:05 CDT, 15:12:05 GMT
6/8/73

CC And incidentally we have - we have put in the first patch in ATMDC as I advised you while ago and everything is going real good there.

SC Take care you guys.

SC Hello, Dick. You still there?

CC Yes sir, I am.

SC Audio inside now, ain't it? Voice record yesterday's food. Remind me and I'll give it to you at Carnarvon, will you please.

CC Okay, sure will.

PAO This is Skylab Control at 13 hours 7 minutes during that combined pass over Ascension Island - rather Canary Island and Ascension Island. We got a call from the crew advising that they were just getting up and about and very close to the time that we planned to awaken them. And they were advised by CAP COM Dick Truly that the coolant loop situation has remained stable during the night. Crew was asked to leave it in the configuration that they had when they went to bed at about 12:30 a.m. And in response to a question from Conrad, Truly said we simply don't have a good handle at this time on the nature of the problem with the coolant loop in the airlock module. Again to repeat the situation is roughly as follows, the primary loop is off line at the present time. The primary loop has a problem with a valve that deverts coolant into the radiators to have temperature transferred from the fluid to the cold of space. This valve which should modulate in some fashion to maintain the desired temperature appears to be stuck wide open and consequently the loop is frozen up and is shutdown and we're operating on the secondary coolant loop in the airlock module. It is stable but is running cooler than desired. The last report we had on that showed the temperatures to be between 36 and 38 degrees. We are planning a Change of Shift Briefing. Our estimate on that at the present time is 9 a.m. in the Johnson Space Center Briefing Room, building 1. Flight Director Chuck Lewis will be participating in that briefing. At the present time Flight Director Milton Windler and his team of flight controllers have taken charge of today's activities, and are in the process of reviewing the status and deciding what to do about the coolant loop in the airlock module, determining a course of procedure, course of action and a series of procedures to troubleshoot the continuing problem with the secondary loop and to determine what can be done to remedy the problem - get things back to normal. The electrical power situation would appear to be greatly improved after the deployment of the solar panel. The report is that the solar panel on the orbital work shop is now

SL-II MC691/2
Time: 08:05 CDT, 15:12:05 GMT
6/8/73

putting out approximately 3,000 watts of power under peak solar conditions at the current beta angle. Two of these wings - which would be the normal mission configuration would put out to 8,000 watts. However, with the current beta angle we have, 3,000 is considered to be just about nominal for the single wing that we have deployed - single solar array on the workshop. And prior to going off shift, Flight Director Chuck Lewis requested that his flight controllers review their situation with individual systems and operations to determine what activities that have previously been curtailed because of the power shortage could be resumed. That is going on at the present time. We have about 20 minutes now before we reacquire radio contact with Skylab. The spacecraft currently on its 359th revolution and we will be reacquiring at Carnarvon Australia. This is Skylab Control at 13 hours 11 minutes.

END OF TAPE

SL-II MC692/1
Time: 08:26 CDT, 15:13:26 GM
6/8/7

PAO This is Skylab Control at 13 hours 28 minutes. We're just a few minutes now away from the scheduled reacquisition time of Skylab on it's 359th revolution and we'll be picking up radio contact first through the Carnarvon, Australian, Tracking Station and then slipping into coverage - overlapping coverage from the Honeysuckle Creek, Australia station before moving out over the Pacific and up over north of Hawaii. Flight Director Milton Windler at the present time going over today's Flight Plan activities with his flight controllers and are discussing ATM activities. the crew is also scheduled to perform SO73 as well as medical experiment M092 and M171 as the major experiment activity. They are in the pre or post-sleep activity section of the Flight Plan at the present time. That's to continue up to shortly past 15:00 hours Greenwich mean time or about 10:00 a.m. central daylight time. We show acquisition of signal now. We'll stand by for a call to the crew from CAP COM -

CC AOS over Carnarvon for the next 6 minutes.

SC Good morning, Crip. How are you today?

CC Fairly fine and you guys sound rather cheerful after having to get up in the middle of the night.

SC Well, glad to do it to save our happy home.

CC Very good. Maybe it's getting a little bit happier.

SC Now let me give you quickly my menu for yesterday, Bob. It didn't get recorded last night.

CC Okay.

SC Okay, ate everything except delete macaroni, item 74; bread, item 75; 1 coffee, number 62; optional salt, 9.0; and I put on the tape recorder last night while we were ricocheting around lashing up LCG's I couldn't resist one can of butter cookies.

CC Was that butter cookies you ate or did not eat?

SC Bill that's an extra one I snuck in that I ate.

CC Well okay. One can of butter cookies.

SC Label that a midnight snack.

CC Sounds good. I can think of better things than that. CDR, Houston.

SC Go ahead.

CC We have you scheduled as you might have noticed on your Flight Plan today for a tape recorder check-out and changeout. Apparently that thing failed on us and we asked you to check a light on it. We need to coordinate that over a ground station when you do because we have to

send a command for reconfiguration. When that comes up would you just not do it until wedo have a ground pass.

SC Okay, understand and what is that, tape recorder number 1?

CC That's affirm.

SC Okay, very good. Then I'll wait for you to tell me what to do.

CC Okay. We've got that details on an odds and ends message which we're going to be sending up for you very shortly.

SC Okay, very good.

SC Oh, and Bob, while you're thinking about it the ground may want to take into consideration how we do this on the next EVA but we used up the three UCTA's that were spelled out for our day 26 EVA that we took out of the dome locker. So however they would like to juggle UCtA's for the next EVA why don't you have the stowage people think about that because we're going to - somebody's going to have to replace the ones that we use the next time - somebody's got to bring some more up.

CC Okay, appreciate that reminder. We'll have our stowage people work on it.

END OF TAPE

SL-II MC-693/1
Time: 08:33 CDT, 15:13:33 GMT
6/8/73

SC Got any news for us this morning?
CC I've got the morning news here, per your request; if you'd like, I can give you a few blurps.
SC Yes, please.
CC Okay. By the way, this is kind of somewhat old news down here. I wasn't working when it occurred. Did you hear about the TU-144, the Russian Supersonic Transport that crashed last Sunday?
SC No.
CC Okay. It was during the Paris Air Show. I guess the aircraft made a couple of passes over the field, and it pulled up for a turn to come in to a landing, and apparently - well, the description of it in the newspaper was that it fell and then ended up exploding and lost the crew and some town people in the village surrounding the airport.
SC Oh, I'm sorry to hear that.
CC That's pretty bad. For some what is called late news, you guys were headlines today, on managing to get that solar panel out. And all of us are rather happy about that. The - Some news summaries I've got - the people passed on to me here. I can go over a couple of them for you. Said two California astronomers reported the discovery of a quasar, believed to be the most distant recorded object in the universe. And that was Dr. Joseph Wampler of UC, Santa Cruz, and Dr. Margaret (garble) I believe of US San Diego (garble) in identifying the quasar with the vast equipment linked with the (garble) Observatory, as that quasar's believed to be about 10 billion light years from earth. Mr. Clarence M. Kelly, the Kansas City Police Chief, has been nominated by President Nixon to serve as director of the FBI. The 61-year old law enforcement officer served as an FBI agent for 21 years before he joined the Kansas City Police Department 12 years ago. Also, today, West German Chancellor Willy - Willy Brandt is on an official visit in Israel, where he was praised by Mrs. Golda Meir for his stating upon his arrival that the sum of the suffering and the horror cannot be removed from the consciences of our people. I guess - The headlines in the Houston Post this morning read, "SPACEMEN FREE SOLAR PANEL. SKYLAB'S ENERGY CRISIS SEEMED SOLVED THURSDAY NIGHT AFTER A TWICE AROUND-THE-WORLD REPAIR JOB BY TWO OF THE COOLEST CATS EVER TO LABOR IN SPACE SUITS." And if I've got anybody interested in astrology up there, I can give you your so-called predictions for the day. Pete, your's is: Endless rounds of discussion get nowhere but serve to slow down your progress. Says to concentrate on your own affairs and select simple goals. PJ, your's says: Yesterday's challenges continue to escalate. If you must make changes, put your attention to be thorough and complete. And for Dr. Joe: Discretion carries your day. Be

explicit. Volunteer no side issues which might confuse matters. Family and associates are restless.

SC I'm sorry to hear that. I'm going back to bed.

CC (Laughter). Okay.

SC Say, you still there, Crip?

CC That's affirm. We've got abou. another couple of minutes.

SC Okay. For planning purposes, unless someb dy has some strenuous objections on the ground, we'd like to share the wealth a little bit up here. And ah - Having a discussion amongst Joe and myself, we elected to let PJ do EV-1 on day 26, and I'll do EV-2, if everybody doesn't have any objections to that. We're all trained in the different jobs, and we thought we'd like to let PJ get outside.

CC Okay. We'll run that one around the flag pole.

SC Thank you.

CC Skylab, Houston. We're 1 minute til LOS. We'll see you again at Guam at 13:45. And I've just been informed that we also need a food report from Joe. So maybe if he could have that for me at the next pass, I'd appreciate it, sir.

SC The menu report for yesterday: Ate everything except one tea with lemon and sugar - no salt, no DELTA H2O, no nothing else.

CC Okay. Understand. The only thing different was one tea with sugar and (garble). That's nice and quick.

PAO This is Skylab Control. During that pass over the combination Carnarvon and Honeysuckle Creek Ground Stations on the Australian Continent, a number of topics covered with the crew, including thei. food reports. And some discussion on the tape recorder and the airlock module, which is used to record voice and data. That recorder appears to have failed. Flight Director Milton Windler reports we're going to do one more series of troubleshooting - make one more attempt to repair the recorder. And if that doesn't work, the plan is to replace it with a spare carried on board. One other item of significance that came out of the conversations was a request from Commander Pete Conrad that the ground look into the possibility of having Paul Weitz participate in the day-26 EVA, to retrieve Apollo telescope-mount film. Conrad's suggestion was that PJ, Paul Weitz, do the EV-1, with Commander Pete Conrad doing EV-2. And the response from Mission Control was that we would look into that. In about 3-1/2 minutes we just barely acquire at the Guam Tracking Station. That will be a very low angle, low elevation pass. If we get any contact, it will be, we suspect,

SL-II MC-693/3
Time: 08:33 CDT, 15:13:33 GMT
6/8/73

rather poor quality. And then in about 13 minutes, we are scheduled to acquire at Hawaii. This is Skylab Control at 13 hours 42 minutes Greenwich mean time.

END OF TAPE

SL-II MC-694/1
Time: 08:43 CDT, 15:13:43 GMT
6/8/73

PAO This is Skylab Control. We're standing by for any possible acquisition through Guam. We don't expect much, but we'll see what comes out of this very low elevation pass. We'll be, if we get radio contact, be establishing that in about 30 seconds.

CC Skylab, Houston. We're AOS over Guam for about a 3-minute pass. And PJ, for you, are - your mineral supplements for today are 3 calcium tablets, and no one else has to take any.

SC Crazy. Thank you.

CC I though tyou'd like that.

SC I don't mind.

CC Skylab, Houston. We're 1 minute till LOS, and we'll see you again at Guam at 13:55, 1, 3, 5, 5.

CC Skylab, Houston. In case I messed up on that, the next pass is at Hawaii, at Hawaii.

SC See you at Hawaii, and the calcium's down.

CC Good for the calcium.

PAO This is Skylab Control. Relatively little conversation on that short pass over Guam. And we'll be reacquiring through Hawaii in a little less than 6 minutes. We'll come up again for that acquisition.

END OF TAPE

SL-11 MC695/1
Time: 08:54 CDT, 15:13:54 GMT
6/8/73

PAO This is Skylab Control at 13 hours 54 minutes, just about a minute now or less away from regaining radio contact through the Hawaiian Tracking Station. We'll stand by for all that.

CC Skylab, Houston. We're AOS over Hawaii for about 2 minutes.

SC Okay.

CC Skylab, Houston. We're one minute to LOS we'll see you again over Goldstone at 14:07 - 14:07.

PAO This is Skylab Control. We've gone out of range of the Hawaiian Tracking Station. It'll be a short skip now to Goldstone, California and a fairly lengthy stateside pass down across the border between the United States and Canada, just below the Great Lakes, and out over the Atlantic, crossing right through the middle of the circles for a MILA and Bermuda Tracking Stations, also clipping the top of the Texas circle so we should have acquisition all the way across this stateside pass, with perhaps a brief drop-out between Goldstone and Texas. The crew getting geared up for a fairly active day of experiments and today after their EVA of yesterday the situation appears to have stabilized as far as electrical power, and the coolant loop situation in the airlock module is also stable and we appear to have a pretty good power profile with the solar panel on the orbital workshop, the one that was deployed yesterday and putting out about 3,000 watts peak. This is very close to what we would expect for a single normally functioning solar panel. The pair of them could put out a total of up to 8,000 watts. That would be for the maximum beta angle. And at the beta angle or solar exposure that we have right now 3,000 watts is about what we would expect for a normally functioning solar panel. Among the experiments that the crew will be performing today: two prime ones would be the M092, lower body negative pressure experiment, testing the cardiovascular condition of the crew and any deconditioning that may have occurred due to the period of time they have spent in zero gravity. And also runs with the Science Pilot Joe Kerwin and Pilot Paul Weitz on the bicycle ergometery - or bicycle ergometer - checking their metabolic activity. Both of those activities are of interest to determine the effects of prolonged space flight on the human body. And we might note that at 2:35 a.m. central daylight time, Skylab [illegible]d the time in space record for the United States established by Gemini [illegible]. Flight Director Chuck Lewis has left the Control Center now and is [illegible]route to the building 1 briefing room for a Change of Shift Pre[illegible]efing. We expect that that Change of Shift Briefing now will occur at [illegible]5 central daylight time, about 10 minutes from now.

END OF TAPE

SL-II MC-696/1
Time: 09:05 CDT, 15:14:05 GMT
6/8/73

CC Skylab, Houston, we're AOS over Goldstone for about, oh, about 6 minutes. We'll have a couple of drop outs running across the top.

SC All right.

SC Are you gone, Crip?

CC Say again, please?

SC I was wondering if you were still with us. Say, while we got a minute, and now that we got some power back, we were discussing the possibility of how we'd do our meals differently if we could use the heaters. As it turns out we probably wouldn't do it much differently than we're doing right now, because and I bet you this a long time ago, but it may have gone down the crack, we've got a lot of gas in this water. When you fill a rehydratable food package, with either hot or cold water, the package swells almost to its total volumetric capacity, with gases, and there really isn't any way you can put that kind of food cold in the food tray and put the lid on it, and eat it. The only thing you can do with those dehydratables that are supposed to be hot, are use the hot water. That works fine on all of them except about two, which really take a long time to reconstitute, that's the macaroni and the spaghetti. But that's a problem you might add thought to the followon crews, because it doesn't make any difference how much power we got up here, I don't think they're going to do the meals any differently than we've been doing them, but you get most of your meal prepared right before (garble).

CC Okay, copy, and we'll pass that on. I know Al's going to be disappointed if you can't prepare, prepare spaghetti right. You can't even let the air out by depressing on the valve, is that correct?

SC Yeah, if you do you get, you get, a lot of fluids come out of it. When you got a juice, you get juice up a drink valve and slop cold, whatever it is, into your mouth while you're letting air out into your mouth which is the best place, because it just goes all over the place.

CC Oh, okay, we'll pass that on to the food people and the crews.

SC Okay, it's not something you can't cope with and there really is a process. I don't think anymore about it, but it isn't essentially the way we planned it.

CC Okay.

SC I might say that the hot water is very hot and it does a good job, you can leave food reconstituted for 3 or 4 minutes before you start eating it and it's still very warm when you start to eat it.

CC Very good, that's good to hear.

SL-II MC-696/2
Time: 09:05 CDT, 15:14:05 GMT
6/8/73

SC Say, Crip, you still with us?
CC That's affirm.
SC I know MCIL's got a lot of problems, but how about asking him to consider where we turn on the hot water heater in the waste management compartment today, that we could leave it on.
CC That's affirm, you've got a GO to turn it on and leave it on.
SC/MS Yeah.
CC Aren't we nice to you guys, we figured you'd like those hot showers.
SC Well, we just wanted some to - for you know, flight pads and everything, it's been a little chilly doing that, especially since the vehicle cooled down.
CC Roger. We may get a couple of minutes dropout on voice here, if we do, I'll have you again over Goldstone at 14:13. Correction, at Texas.
SC Okay.

END OF TAPE

CC (Laughter) Okay. On those 8073 periods you can just use those for general cleanup that we'd taken away from you earlier.

SC Okay, but don't do that anymore. Ya'll are going to figure out how we operate up here (laughter).

CC Trying to get ahead of us, huh?

SC Well, I'm afraid to get too far ahead.

SC I woke up early this morning had to prowl.

SC Say, Crip, are you still with us?

CC Affirm.

SC Will you need me to - because of which tape recorder you want or you want to run that tape recorder stuff and tell me which one to change?

CC Okay, it's one that's bad. But we've got - we want to do a checkout on it and let me - stand by one and let me check on the status of this message.

SC Well, it may be up there. I haven't looked but I'm available anytime. If you want to plan it for the next station I'll be there.

CC Okay, Pete. I think that sounds pretty good to us. Let me verify what the status of this message is.

SC Okay, and what's the next station?

CC Ascension. And it's Ascension and it's at 14:34.

SC Roger, Ascension at 14:34. We're directly over head Bermuda now and it looks like everybody in the tracking station has got a nice day. I wish I was at the beach down there.

CC I think it's a pretty nice day all over the U.S. We've got the odds and ends message up there in your teleprinter right now and the first line on it, I think, explains what we want to do with the teleprinter and you might take a look at that before we get to that pass. And we'll be doing one command over Ascension, and then check a light and if it doesn't work out - we'll be asking you to change it out for us.

SC You didn't mean teleprinter - you mean tape recorder, right?

CC I'm sorry, yes.

SC Okay, see you at 34, bye.

CC And we still have about 4 minutes to go here in case anybody's got any traffic.

SC Yeah, PJ's got the prowls and I've got the whistles so we're whistling around and working.

CC Okay.

SC Still there, Houston?

SL-11 MC697/3
Time: 09:13 CDT, 15:14:13 GMT
6/8/73

CC That's affirmative.

SC Crip how about asking somebody to look into something for us, will you. There's a greasy film on these [illegible] windows and when you try to clean it with plain water it doesn't do a very good job. Now we've got these separate wipes that haven't been - I wanted somebody to experiment on the ground before we try it up here. See if anybody could come up with anything to help clean the windows, will you, please?

CC Okay. You got any idea what the film is?

SC It's - it's greasy kind of stuff - it's just what comes off the air - no I don't.

CC Okay.

SC Wait a minute. A guy on a white horse just appeared in the window.

CC Well, despite your guy on the white horse we'll go ahead and look into it for you.

SC Okay.

CC Skylab, Houston. We're about 30 seconds from LOS and we'll have you again at Ascension as I said at 14:34 and the DAS is yours again.

SC Okay, thank you, Bob.

PAO This is Skylab Control at 14 hours 26 minutes. We're out of range now of the Bermuda Tracking Station and we're ready to begin the Change of Shift Press Briefing. We'll switch at this time to the Johnson Space Center Briefing room in building 1.

END OF TAPE

SL-II MC-698/1
Time: 09:51 CDT, 15:14:51 GMT
6/8/73

CC Skylab, Houston.
PAO This is Skylab Control at 14 hours 52 minutes. During the change-of-shift briefing, we accumulated about 5 minutes of tape recorded conversation with the crew through the Ascension Island Tracking Station. We'll replay that for you now.
CC Skylab, Houston. We're AOS over Ascension at this time, and we've just sent up a command designating tape recorder 1 as our data recorder. We would like you to check panel 204 tape recorder's rotary - by the rotary switch to verify whether the STOP light on tape recorder 1 is on or off.
SC Okay, the CDR is enroute.
CC Thank you, sir.
SC Okay, Crip, the tape recorder 1 light is on.
CC Roger. Copy it's on. Roger, Pete. That means that it's kaput, and we need you to change it out as we've mentioned in that message that is in your SWS Systems checklist, 4-26.
SC Okay, Crip, we'll have it done here in a little while.
CC Okay.
SC Say, also Crip, we've had a BATT CHARGE light on forever - since sometime yesterday. Can you give me a reason for that, (garble) forever (garble), or what? It's on the ATM.
CC Stand by on that.
SC Speaking of BATT charge, Crip, how about - you want us to enable the CAUTION/WARNING for the airlock module batteries?
CC Let me check on that one also, Pete.
CC Okay. PJ, you can go ahead and enable that CAUTION/WARNING for the airlock module batteries, and we'll get a procedure to get that light out for you on the BUTT CHARGE.
SC Thank you.
CC Okay. And also, CDR, we've had a question come up here that we'd like you to ponder for awhile, please. And that is, if it is decided to deploy the MSFC sail, do you think that should be done with the normal EVA, or should we do it in two EVAs? I guess the prime question is, how crowded is it going to be in the airlock when you're going out? The concensus here seems to be that it would probably be better to do it in one, but we would like your recommendation.
SC Well, I'll tell you. I've already pondered that one, and I've got an answer for you. The way that we agreed to do it on the ground, if we were going to do it in that

manner, was that we would suit up and do one EVA, whichever one it was, in whichever order you wanted it done, and that was do the ATM. And then we would pop back inside, rethread the airlock, take off our helmets, eat lunch and not get out of our suits, get back into suits, do a little (garble) check, and pop back outside and do the next one. Now that's a very easy thing to do. If you decided to do that, we would use the SPT on the sail deploy and then swap out, 'cause he's already suited anyhow, the PLT on the film deploy.

CC Okay, Pete, we copy that, and we'll pass it on.

SC Yes, here's my feeling, Crip. I would do it in the following order also. I would do the film deploy right away at the first EVA. I believe we could get that done in the shortest amount of time. I've also rigged most of the station out there. If you didn't catch it yesterday, I did configure both trees with the hook while I was sitting there doing nothing, and so the station is ready to go. And I think we can do a very fast job on our film transfers and pop back in, close the hatches, relax and reconfigure the airlock, with the sail, and then pop back out and do the sail.

CC Okay, I copy that. We're about to go AOS. See you again at (garble) at 15:04, 15:04.

SC Now if anybody has any big serious reasons for not doing it that way, which is the way we talked about it on the ground before we left, why I'll be more than happy to entertain those.

CC Okay. Thank you, sir.

PAO That concludes the tape playback of conversations with the crew through the Ascension Island Tracking Station. To kind of reiterate the conversation, Pete Conrad first was asked to troubleshoot the tape recorder that appeared to have failed in the airlock module. This is one of several aboard the vehicle, used for both voice and data recording. The check indicated that that recorder had, in fact, failed, and the crew was given the "go ahead" to change it out, replace it with a spare carried on board. Also there was a discussion of the EVA, which - and procedures which maybe followed on the 26th day of the mission. This had originally been intended as a single EVA to retrieve the film from the ATM experiment. And prior to the SL-II crew launch, of course, there was the exercise to determine what sort of sunshade was needed to replace the micrometeorite and Sun shield that had been ripped off during launch. And subsequent to the deployment of the parasol, some indication that it may be necessary to deploy an additional solar shield or sunshade toward the end of the mission, ostensibly during the ATM film retrieval EVA. Conrad's

recommendation was that if it is necessary, if it's determined by the ground to be necessary to deploy the Marshall Space Flight Center developed sunshade, to replace the parasol, that it be done as a second EVA, on day 26. The recommendation from Conrad was that the crew suit up, go out to retrive the film, come back in, remove helmet and gloves, have lunch, and then repressurize the suits for a second EVA in the afternoon to replace the sunshade. His recommendation on crewmen for these activities was that the science pilot, Joe Kerwin, participate in the EVA, along with himself, along with Pete Conrad, on the sunshede deployment and that the pilot, Paul Weitz, participate in the EVA for film retrieval. And those recommendations are under consideration at this time. Of course, again to repeat, this second EVA would be contingent upon a decision, which has not yet been made, to deploy the additional sunshade, which would be the Marshall Space Flight Center developed shade. We have about 4-1/2 minutes remaining until we regain radio contact with Skylab, through the Carnarvon, Australia, Tracking Station. We'll be back up at that time.

END OF TAPE

SL-II MC-699/1
Time: 10:03 CDT, 15:15:03 GMT
6/8/73

PAO This is Skylab Control. Skylab now on its 360th revolution of the earth and coming up on acquisition at the Carnarvon, Australian tracking station. We'll get the lines up and stand by for conversation with the crew on that pass.

CC Skylab, Houston. We're AOS over Carnarvon for the next 10 minutes, for the next 1 - 0 minutes.

SC Okay. You're handy-fix-it crowd has changed out the tape recorder. You want to check it out?

CC Okay. We'll see if INCO wants to take a look at it.

SC Okay. And ah - I replaced it with side number 22.

CC Roger. Number 22.

SC And also, Crip. For your information, I transported 04, the failure mode was on the take up side drive sprocket. And the transporters are filled, don't ask me how it did this, wrapped itself 360 degrees around the transporter drive or idler gear about 4 times. I don't know how it could do that. We're trying to unravel it now.

CC Okay. We copy that.

CC And, Pete. For your information, per your request we're trying to get you up a new ATM cue card, which reflects all the changes that we've made. It's setting out here at Carnarvon, now. And I don't know if we're going to make it up at this pass or not. But it'll be up shortly. It is intended only to be used for the day, though, because it was put together last night in a rather hurried fashion. And we've checked it several times. We think it's correct, but tomorrow we're going to give you one that is good and that we've run in the simulator and we know it is good.

SC Okay. Thank you, sir.

CC And, CDR. For your information, that recorder checks out good. You guys do mean it when you say you fix anything, don't you.

SC We try.

CC They'll put you in the CBs if you don't watch out.

SC Now, Crip. We have cleared transporter 04. And I don't know what the crowd would like to do down there. I'm not sure that there's anything wrong with it. It seems to be all right. What would you like us to do with transporter 04? Red label it and put it away, or try her again? Because I think we should - a chance which could have been caused by the takeup spool being - I mean, a little loop in it, being almost full and not accepting any more film. That to me is more likely(garble) than the transporter. Because there was very little film remaining on the supply reel. We just

stripped it out to throw it away. And there was very little film remaining on the supply reel. So I kind of think that might have been the problem. And it's a good transporter. We'd just as soon go ahead and use it, if the camera people concur on the ground.

CC Okay. Let me get a recommendation from (garble) first.

SC Hey, Crip. You there?

CC Affirm.

SC Okay. We've never done day-11 transfer, which are EREP tapes. I assume that we'll do that, whenever you - w. finally get enough EREP tape to do that. Is that correct?

CC We'll check on that. And on the status of your transporter, what we'd like you to do is just go ahead and put it back in the drawer and we'll schedule it for a takeup of transporter 1 when it's required.

SC Okay. It looks good to me. It runs free and, it looked to me like the film just jammed up at the exit end there and tried to go into the takeup reel.

CC Okay.

SC Very good response.

SC Okay. Now back to page 14, cryo, fan, 02 valve, and all that balony. We're not going to do that because we're still running the fuel cells, right?

CC I'm sorry Pete. I didn't copy your last statement.

SC I'm in the stowage book. And I'm reading the stowage that has not been done - day 11; day 13 we can take care of ourselves, and day 14 stowage has not been done either. And I gather we're not going to do that until we run the fuel cells dry.

CC I think you're correct on that. But we're verifying it here.

SC Okay. Page 15, we'll take care of.

CC Skylab, Houston. We just sent you a color - sent a message on ATM cue cards to be used for today and also the text message's up and hopefully that'll do it, for awhile on teleprinter messages. And we're still researching your transfer question, Pete.

SC Okay.

END OF TAPE

SL-II MC700/1
Time: 10:13 CDT, 15:15:13 GMT
6/8/73

CC Skylab, Houston. We're 1 minute to LOS. We'll see you again at Guam at 15:18 and hope that we'll have the answers to your stowage questions at that time.

SC Okay. Next question, Crip. Suit drying - suit drying - they wouldn't let us turn it on last night. Can we start the suit drying?

CC We're checking.

SC Thank you.

PAO This is Skylab Control. We've gone out of range of the Carnarvon Tracking Station. We're about a minute from reacquiring contact through Guam. During that Carnarvon pass, Pete Conrad verified that the tape recorder in the airlock module which had failed had been replaced and we checked out the replacement unit, found it to be working properly. Also Conrad reported having done a bit of trouble shooting on a film canister for the 16 millimeter data acquisation camera which had hungup and he found and apparently cleared the problem. And that reel - which had been used as a supply reel for the previous load is now available for use of the takeup reel in the future if needed. And we're standing by to regain radio contact in about 20 seconds through Guam.

CC Skylab, Houston. We're AOS over Guam for the next 8 minutes. And CDR, per your questions, the day 11 transfer -

END OF TAPE

SL-II MC-701/1
Time: 10:21 CDT, 15:15:21 GMT
6/8/73

CC And CDR, per your questions. The day 11 transfers will be scheduled on day 161, prior to the EREP, that's day after tomorrow.

SC Very good.

CC And - Roger, I said that day 11 transfers would be done on day 161 prior to the EREP, at least that's our intent currently.

SC Very good.

CC Regarding the day 14 transfers, you were correct we'll be saving that for fuel cell shutdown which is estimated at day 166.

SC Okay. Got another question for you.

CC Okay, let me give you this other one, regarding your suit drying, you're okay to turn on the blowers and you're okay to turn on the heaters to drive the (garble).

SC Very good, and then my next question, is it's getting pretty raunchy down there in the command module, we'd like permission to bring up the command module fan again.

CC To bring up the command module what, please? Fan?

SC You know, the airlock module fans, in the command module, to blow air into the command module.

CC Okay, that sounds like a good idea from here, you've got a GO for that.

SC Okay, you want us to run it on LOW or HIGH?

CC On HIGH.

END OF TAPE

SL-II MC702/1
Time: 10:40 CDT, 15:15:40 GMT
6/8/73

CC Skylab, Houston. We're ACS over the States for nice long pass there - should be about 15 minutes.
SC Okay, Houston, you've got H-alpha 1 on the PC. I'm working two monitors; so when you want to look at H-alpha 2, give me a holler, and I'll switch.
CC Okay, understand we've got 1 on now. And, Pete, we're going to be doing a computer load implementation at this pass. We'd like you to stay off the DAS for a little while, please.
SC DAS power is off.
CC And if the PLT is available, you'll never believe it, but I've got a message modification for him.
SC I hope it's got nothing to do with the 192 alinement that I just finished the visible part of.
CC Would you believe it did? Question is, did you get the READY light when it was called for?
SC I put all that stuff on B channel. Let me - if you can get any other traffic?
CC Negative.
SC Okay, here it is in summary. Negative. I have discovered apparently that the only time I get an ALINED READY light on the 192 gear is when I have a READY light on the C&D panel.
CC Okay, but you did not get a READY light on the C&D either. Is that correct?
SC Negative. Negative. I got a READY light on the C&D every time I expected it. The only conditions under which I could get an ALINED READY light was to have a C&D READY light.
CC Okay, that jives with what the people down here think that you should have.
SC It doesn't jive with what I thought we should have --
CC Okay, I guess my --
SC - - information.
CC Okay, I guess my real question, PJ, is that in the procedure on the first page on panel 110, when you got to where you had - supposed to have the S192 mode with a READY light, did you get that ready LIGHT? And then I understood that's affirmative.
SC That's right. Also, you lost the star-tracker pad. Just give us the gimbal angles if you've got them handy, will you please?
CC Wilco. Stand by 1 on that.
SC And while you're doing that, let me make some more comments about the 192. May I?

SL-II MC702/2
Time: 10:40 CDT, 15:15:40 GMT
6/8/73

CC Roger. If you can let me go ahead and give you those gimbal angles, I've got them available here.
SC All right, do.
CC Okay, the inner gimbal is plus 0081 and the outer gimbal is plus 1628.
SC (Garble). How about the times on that frame?
CC Roger. It's day 159, valid from 1300 to 2300.
SC No, the orbital times - when it is available.
CC Oh, I'm sorry. It's available day 4030 to night 1530.
SC Got it. Thank you.
SC Okay, can I jaw some more about EREP?
CC Let me have it.
SC Okay, I just finished the visible alinement. The values I got are the left meter reads 85, the right meter reads 54. The focus range, looking down into the open top of the can - the visible focus range is right up against the full counterclockwise stop.
CC Okay.
SC I also have a distinct impression that the Y-axis adjustments arm is getting very close to, if you look into the mechanism, its clockwise limit. It's starting to get kind of stiff.
CC Roger.
SC That's about it except for an interesting fact that I wasn't aware of. Maybe all the guys in the back room knew it, but I didn't. Is that when you open the S192 door --

END OF TAPE

SL-II MC-703/1
Time: 10:48 CDT, 15:15:48 GMT
6/8/73

CC Roger.
SC That's about it, except for an interesting fact that, I wasn't aware of, maybe all the guys in the back room knew it, but I didn't, is that when you open the S192 door, the thermal reading on this meter goes up about 50 percent, in other words, it's reading 45 right now and if I open the door it goes up to a little over 60. Do they know that?
CC Okay, apparently the boys in the back room agree that that's normal.
SC Hey Crip, (garble) to monitor.
CC Roger. Thank you.
SC Hey, Crip, you faded, did I understand you to say that yes this 193 systems experts expect that when the door was open?
CC The ERE? people tell me that they did expect that increase when the door was opened.
SC Okay. You mean you're not going to let me aline it with the door open, till I get these high readings now?
CC We'll check on that.
SC I'm only joking.
CC I thought you'd like to aline it again.
SC No thanks. I'm very serious about this thing.
CC That's why I left it for Hank, last night, to tell you you were going to get to do it again.
CC And CDR, if you've got a chance, I guess we're sitting here loading this beauty for you this morning and modifying your program slightly, and we don't know if you've ever been briefed on what it is we're doing to it. Have you?
SC Nope.
CC Okay, let me see if I can't get together a little story for you. It's really no impact on crew operations, I don't believe, but there are some mods there that you should be aware of.
SC Okay, and in the meantime, here comes the white light coronagraph at you.
CC Roger, the WLC.
SC Okay, Crip, the 192 seems to have stabilized. In the thermal channel, as soon as I move that focus ring away from the stop, which is the await stop right now as described on the pad, I lose it completely. It drops right off the bottom and goes pouring down to 12 and sets there and I get it back by bringing the focus range back to the f/stop and that's where I'm going to leave it.
CC Okay, copy. I guess do you feel like if you had more movement on your focus that it would come in better?

SC When it gets to the focus stop, I can't turn it down yet, so the answer is yes, I think I could.
CC Okay.
SC And are you ready for XUV ON?
CC Stand by one on that.
SC Man, I'm like a kid with a new toy. I got two monitors super.
CC I was unable to copy your last, Pete, I guess we're not getting your TV real time, unfortunately, so it's okay to switch to XUV MOD now.
SC You don't mean you want me to record it on the VTR, are you getting it someplace downlink?
CC I - try to understand they're supposed to be recording it now on the ground and they'll be shipping it into us later. It's not for you to be putting on the VTR.
SC Okay.
SC Are you there, Crip?
CC That's affirm.
SC Okay, thermal channel reading is maximized at 43 percent. I'll give you the new settings, they're not much different, but let me give them to you anyway on the mike. Okay, Houston, the micrometer setting's on thermal adjustment Z is .518, X is .528 and they're both, just as I said, fullout.
CC Roger, I understood Y was .518, X was .528 and you're fullout at this time, is that correct?
SC That's right, Crip, that was Zebra not Yolk.
CC I'm sorry Zebra, right.
CC And PJ, our EREP people tell us that 43 percent, looks good.
CC And PJ, I don't know if you copied my last transmission, but 43 percent does look good.
SC Okay, thank you, Bob.
SC Okay, in our present condition, Bob, on SC54, the door talkback indicates white, which I guess is suspected. We do not have a ready light, Pete just started a sequence that appears to be taking photos at the proper intervals, the frame count is decrementing, we do not have a operate light either. Is that the way we're going to live with this thing from now on?
CC Okay, our ATM people tells me affirmative, and I understood the door talkback is white and no ready or operate light.
SC That's right, but the frame counter is now decrementing.
CC Frame count decremates. That's affirmative. That will be normal operation from now on.

SL-II MC-703/3
Time: 10:48 CDT, 15:15:48 GMT
6/8/73

SC Yipee.

CC Goody, goody. Sort of a quick summary of what we're doing to the computer. We've already input new inertias to account for your condition of your solar panel wing. That is one off and one out. We've done on - updated your TACS thrust in pulse width to be used in case of a switchover and also we changed the logic slightly, such that the backup strapdown does use the Sun sensors, Joe might me interested in putting that on his little card. Also, we have because of all the rate gyro problems, we've been having, we modified it such that if we do get to switchover, the computer retains the gyro drift compensations that we've made on the other computer.

END OF TAPE

CC - -such that if we do get a switchover, the computer retains the gyro drift compensations that we've made on the other computer. And that is different than the way we figured we had it.

SC All right, Crip, that means that the gyro drift (garble).

CC I'm sorry, Pete, I was unable to copy your last.

SC I said that means we don't have to keep this fancy switchover gyro drift update compensation procedure, huh?

CC You're supposed to hold on to that right now. I'll try to get a clarification of that date.

SC You mean you don't trust your new program yet?

CC We haven't completed all of this loading.

SC Hey, Crip; SPT. You're putting all this in the primary computer, right?

CC That's affirm. We're putting it in the primary computer today. We're going to take a look at it and make sure that it all looks good, and tomorrow we'll switch over to the secondary and do the same to it.

SC Okay. Do you expect any problems or unusual indications tomorrow when we switch to the secondary, due to the fact that it's got an old program in it?

CC I think the only thing is that they will have to be rather swift on getting some loads in, to make sure we don't run into a gyro problem. But they're all set up and prepared to do that.

SC Okay. I wouldn't mind a short message on what the procedure is going to be, what the ground is going to do, and what you want us to watch for tomorrow.

CC Okay, we'll try to put that together for you.

SC Thank you, sir.

SC Plus, we'll go ahead and fold everything down up here, just in case.

CC I think that might be a wise idea.

SC Okay, Crip, two more items. One, another little piece of (garble) for the (garble) people. When I went to put the lid back on the cooler door, (garble). The ALINE READY light is on now, and I do not have a 192 READY LIGHT. So they got the ball to figure that out; I can't. I would also like clearance to go ahead and check out the condensate dump primary heater, and I would also like clearance to go ahead and check out (garble) primary timer.

CC Okay. Unfortunately, we've only got about a minute here, and I don't know whether I'm going to be able to

to get a GO for all of those on you, but I'll make a try at it (garble).

SC — There's no rush. Just give me a call whenever you can. I don't need any procedures; I'll go ahead and do it myself.

CC — Not a chance.

CC — PJ, , you're GO to check out the condensate heater or to turn it off.

SC — Okay. Yeah, we will.

CC — Okay. We're about 30 seconds from LOS. We'll see you again at Carnarvon at 16:44. 1, 6, 4, 4.

SC — Roger. About 40 minutes from now, okay?

CC — About 40 minutes; that's affirm.

CC — And, PJ, you can go ahead and put the cover back on 192.

SC — Yeah, I'm going to start powering it down.

CC — Okay.

PAO — This is Skylab Control. We've had loss of signal on that stateside pass. Got a fairly long stretch now before we regain radio contact on the 361st revolution. We'll miss both the Ascension Island and the Vanguard Tracking Stations on this pass and come up next with a very high angle, or rather a low angle, contact through Carnarvon. Spacecraft to be relatively low on the horizon as it's seen from the Carnarvon tracking antenna. And also a low elevation pass over Guam before we come up again on Goldstone, on our next revolution. We have about 39 minutes remaining before we regain radio contact at Carnarvon. And during that stateside pass, we had a report from the crew that they were transmitting ATM television to Goldstone. We did, in fact, receive ATM TV at Goldstone. There are no plans to bring that television into Houston today. That will be brought in at sometime in the future when we have our lines up to the Goldstone site. We have no television planned for today, to be brought into Houston. At 16 hours 6 minutes, this is Skylab Control, Houston.

END OF TAPE

SL-II MC-703/1
Time: 11:42 CDT, 15:16:42 GMT
6/8/73

PAO This is Skylab Control at 16 hours 44 minutes. We're standing by now for establishing radio contact with Skylab, on its 361st revolution. We'll be coming up on the tracking station Carnarvon. This will be a relatively short low elevation pass, followed by another short low elevation pass over the Guam station. And we do have AOS, and CAP COM Crippen has put in a call to the crew.

SC (Garble).

CC Rog. Unable to copy you there, due to the feedback. I'd like to go ahead and give Paul a GO, on his checking out the primary timer on mode Bed-A.

SC Roger, Bob. Okay. And a few words on the secondary condensate dump vent, here. If you're ready.

CC Roger. Go ahead.

SC Okay. When I went to turn it on, the tmperature indicator was reading about 10, 10 degrees. I turned the secondary vent heater on, and it went away for awhile, came back in three or four minutes. And I forget what it was reading, now, but I think it was on the order of 40 to 50. And I thought ho, ho, everything's working all right. But I set my timer for about 8 or 10 more minutes, came back at the end of that time, and the thing was off-scale low, lower really. And the way it sits right now, or when I last tried it 15 or 20 minutes ago, if I'm correct, the primary heater had jumped up to what is apparently, the proper reading of about 20 degrees. But as I select secondary, heater drops down to lower limit.

CC Okay. Understand you're getting about 20 degrees out of the primary heater. And secondary heater goes to lower limits.

SC Yeah. That's when I just cycle it - either primary or secondary to judge the temperature readings.

CC Okay. That's just on a cycle, of the switch even when you don't wait for it, is that correct?

SC That's right. Understand, that when you go to primary it reads something, if you go to off that something stays there, when I go to secondary it reads lower limits. If you go to off the lower limits stays. Apparently, in OFF the last reading stays there.

CC Okay. We copy that.

CC And, Paul. On this primary timer check out on mode Bed A, just to save you a little time, recommendation would be to set both sieves to dump on panel 228 manually prior to selecting primary timer. Correction - -

SC (Garble).

CC Correction on my last (garble).

SC Well, I just set them both to stowage. Stowage won't hurt them for 15 minutes, will it?

CC That's fine.
SC Also, one more data point. We put them both to DESORB yesterday, when they were messing with the secondary coolant loop, or with the coolant loop (Music) And one more time, on the secondary time with both of them in DESORB, and what I'd done manually was turn Bed-A to from ABSORB to DESORB. When I turned on the secondary timer, and gave it a shot, and drove Bed-A to ABSORB and kept B in DESORB.
CC Paul, I'd appreciate it if you'd run back over that for me again.
SC Well, for the EGIL, what it is - it runs away - we didn't think it was suppose to anymore I still maintain, mode Bed-A secondary timer. As soon as you activate that timer, it drives Bed-A to ADSORB and Bed-B to DESORB. Or Bed-1 to ABSORB and Bed-2 to DESORB.
CC Okay. That's as soon as you activate it, I understand. Okay.
SC Right.
CC Okay - -
SC Hey, Crip.
CC Go ahead.
SC (garble) 3 CBRMs, it leaves that BAT charge light on, can I ah - what's the proper configuration for that thing?
CC We're going to try and fix that for you as ah - our pass over Guam at about 1700, if you can stand by on it, please, Pete.
SC Okay. You're going to handle it from the ground, right?
SC Affirmative.
SC Super, you've got it.
CC Okay. I'd like to clearify one thing I told you while ago. I was about a day out of date, apparently. On this load that we did for you on the computer, we did not put in a capability to hold those rate-gyros grip on a switch-over. They thought that over and thought better of putting it in. So that is not going into the computers. And for that reason, that little procedure that you're holding onboard is still applicable. I - And I guess if there's a problem with the way we're handling that, we'd could clarify it for you, but you're still going to have to perform that switchover or that update if you ever get a switchover. We are about to go LOS here in less than a minute. And we'll see you again at Guam. And that's 16:59, 1 - 6 - 5 - 9.
SC Okay. Crip.
SC Okay, Crip. Now that message got pretty well badgered, how about retransmitting that one. We have the

latest gyro count. But retransmit the message that says how to put it in, in case of switchover.

CC Okay. We'll do that, and we're also working up a message according to Joe's request of what we're going to be doing tomorrow and things that he might expect on the switchover to the secondary.

SC Okay. Got it.

END OF TAPE

SL-II MC706/1
Time: 11:49 CDT, 15:16:49 GMT
6/8/73

CC Okay, we'll do that. And we're also working up a message, according to Joe's request, of what we're going to be doing tomorrow and things that he might expect on the switchover to the secondary.

SC Very good.

PAO This is Skylab Control. That's all through Carnarvon. We'll be up again over Guam in about 7-1/2 minutes. And during that contact through Carnarvon, there was a series of conversations between the ground and Paul Weitz on housekeeping operations with the molecular sieve, devices which remove carbon dioxide and moisture from the cabin atmosphere. During this period of time, over the next two to three hours or up through 18 hours Greenwich mean time, the crew has time allotted for personal hygiene, which will include hot showers. They got the "go ahead" this morning to again turn on the hot water heater, which had been off during the powered down configuration. And that brought elated responses from all three, that they would again be back in the mode of getting hot showers. This is not the first time that the water heater has been on, however, during the mission. But it was down during the period of time that the vehicle was powered down to conserve power in preparation for and during the EVA. It's our understanding that previous showers were also with the hot water, but there was for a period of time a distinct possibility that those showers might not be so warm. We have about 5 minutes 45 seconds before we reacquire at Guam. We'll keep the lines up for that acquisition.

END OF TAPE

SL-II MC-707/1
Time: 11:54 CDT, 15:16:54 GMT
6/8/73

CC Skylab, Houston. We're AOS over Guam for 3 minutes. And we'll be doing some commanding to try to reset that BATTERY CHARGE light on the ATM panel and also turning off RATE GYRO Z1, Zebra 1. If you'd stay off the DAS for us for a little while, we'd appreciate it.

CC Roger, Houston.

END OF TAPE

SL-II MC-708/1
Time: 12:00 CDT, 15:17:00 GMT
6/8/73

CC Skylab, Houston. We're 1 minute until LOS. We'll see you again over Goldstone at 17:20 - 1, 7, 2, 0. And we believe we have reset your BATT CHARGE ALERT light on the ATM panel.

SC Okay, Roger.

END OF TAPE

SL-II MC-709/1
Time: 12:04 CDT, 15:17:04 GMT
6/8/73

PAO This is Skylab Control, at 17 hours 4 minutes. We've completed our pass over Guam. We're out of acquisition of that station. And we'll next acquire at Goldstone in about 15 minutes. Over Guam we took action on the ground to clear a battery charge light on the ATM panel, as requested by the crew. This was an irrevlevant reading at that point, indicating that a battery had not been charged fully, but that portion of the circuit, of the battery is - the battery bank is not in use, at this time. And by configuring the system properly from the ground, the meaning of the indication of the panel light was cleared. The secondary coolant loop, which is the one in operation at the present time, has remained stable. This loop is controlling temperature at about 40 degrees, coolant temperature. Now the desired or normal level would we bout 47 degrees Fahrenheit. There's no reason at this point, to suspect that the control circuitry or the control valve is not functioning properly.
It would appear that there simply is not enough heat in the system to allow the valve to mix in the desired amount of heat to bring the temperature to 27 degrees. The feeling is that as soon as the system absorbs enough heat, it will be possible for the valves to control the mixing of hot and cold water in such a way that the temperatures can be maintained at the desired 47-degree level. The situation might be likened to turning the airconditioning thermostat to a lower level, when in fact, the air conditioning system is simply not able to provide any more cooling capacity. And in this case, the situation reversed and there simply is not enough heat in the system to allow the thermastatic control system to bring the temperature up. And we feel that when the heat lowered to the system, increases, that it will perform as desired. We have now, 13 minutes until reacquiring at Goldstone, for what will be the next to the last stateside pass of the day. Following that, we have one more revolution where we acquire at Goldstone only. And then, we're off-range for the remainder of today, with contacts through Hawaii and eventually we'll again, began to pick up Honeysuckle and the Patrick stations. And to supplement the network, we're approaching that period of time where in the parlance of the flight control team, we're off-range. At 17 hours 8 minutes, this Skylab Control.

END OF TAPE

SL-II MC710/1
Time: 12:19 CDT, 15:17:19 GMT
6/8/73

PAO This is Skylab Control. We'll be regaining radio contact with Skylab through the Goldstone Tracking Station momentarily. We'll pick that up now.

CC Skylab, Houston. We're AOS over the States for about the next 15 minutes.

SC Roger, Houston.

SC At my last count, you had one in the library, one in the shower, and one in the command module.

CC Hard to keep track of.

SC Hey, Crip. For the CM people - they may be interested in knowing that the only two places that we've collected water in the command module is on the window at number 5 cover, just a very little bit behind the condensate blanket. The other place is down at the base by panel 377 where the glycol comes in. You might expect that except now, instead of being water, it's turned to ice. But I think now that we have the blower running again, it'll probably go back to water.

CC Okay, we copied that . And, Pete, if you're still in there, any chance you could give us the SECONDARY EVAPORATOR OUT temperature?

SC SECONDARY EVAPORATOR OUT temp is 30 degrees.

CC Rog, copy. Thirty degrees.

SC And command module housekeeping number 7 is in progress, and the (garble) have been running - let me look at my clock here - oh, only about 10 minutes. I've got another 50 minutes to run.

CC Okay.

END OF TAPE

SL-II MC-711/1
Time: 12:23 CDT, 15:17:23 GMT
6/8/73

SC And for FAO, Crip, I'm doing the day 22 command module rejuggling right now, and I'll give them a time line on that when I get done. I think it's going to take longer than they think it was going to take.

CC Okay.

CC Skylab, Houston. The next time somebody's going by the ATM panel we would appreciate it if they would check the S052 WLC.

END OF TAPE

SL-II MC-712/4
Time: 12:28 CDT, 15:17:28 GMT
6/8/73

CC Skylab, Houston. The next time somebody's going by the ATM panel we would appreciate it if they would check the S052 WLC thermal switch, ON, we have commanded it on here, but our indication was that it was off and we just want to make sure the switch is in the right configuration.

SC Okay.

SC The thermal switch is on, Crip.

CC Roger.

END OF TAPE

SL-II MC-713/1
Time: 12:33 CDT, 15:17:33 GMT
6/8/73

CC Skylab, Houston. We're 1 minute to LOS, our next station is at Vanguard at 17:45, 1, 7, 4, 5, and we will be doing a recorder dump at that station.

PAO This is Skylab Control. It was a relatively quiet stateside pass. One of our last such passes of the day, we have one more, where we have a relatively low elevation acquistion through Goldstone on the next revolution. The 362nd. And then there will be a rather lean period with relatively little station contact. Following rev 363rd, the only station coverage we'll have will be Hawaii and Vanguard. During that pass Pete Conrad reported that he and his fellow crewmen were pretty well spread around the vehicle. Pete was in the command module, one of the two crewmen was in the shower, he didn't mention which, and the other was in the library. Pete also reported that there was a very small amount of water condensate in the command module, said that a small amount had condensed out near the number 5 window. And it was also an area where glycol line entered the spacecraft cabin where a small amount of condensate had formed. This is a situation that has become rather common with vehicles operating in space, as the cabin atmosphere picks up moisture, the moisture tends to condense out at cool points. Conrad reporting that the amount of condensate in this particular case almost negligible, brings to mind earlier test runs with the Apollo command module, when it was placed in the vacuum chamber, prior to the start of the program, when several quarts of water would condense out from exposed coolant lines.

END OF TAPE

SL-II MC714/1
Time: 12:37 CDT, 15:17:37 GMT
6/8/73

PAO - - earlier test runs with the Apollo command module and when it was placed in the vacuum chamber prior to the start of the program when several quarts of water would condense out from exposed coolant lines and gradually these lines were tracked down and insulated and the cold surfaces protected from the cabin atmosphere. The point where now the amount that condenses out on cold exposed surfaces is just about nil. We have about 7 minutes remaining before we again acquire radio contact through Vanguard at 17 hours 39 minutes this is Skylab Control.

END OF TAPE

SL-II MC-715/1
Time: 11:44 CDT, 15:17:44 GMT
6/8/73

PAO Skylab Control; 17 hours 45 minutes Greenwich mean time. We're standing by now for acquisition of radio contact through the Vanguard Tracking Ship off the coast of South America. That will be about a 9 minute 48 second period of acquisition. And we appear to be getting locked up with the spacecraft now. Quite a bit of noise along the air-to-ground circuit as we get locked up.

CC Skylab, Houston. We're AOS over the Vanguard for the next 10 minutes, and we will be doing a recorder dump this pass.

SC Roger.

CC And, Pete, for your info, the word I get back on the UCTAs is that they'll be flying three more up on Skylab III to replace the ones that you used. And for your next EVA, you can go ahead and just three 3 more out of the dome locker.

SC Okay.

CC Understand no problem on the cup sizes; all of them are the same.

SC Okay.

CC Skylab, Houston. We're 1 minute until LOS. And you don't have to listen to me again until 19:00, 1 9 0 0. And, Paul, we copy that you're doing that (garble) SEV-A checkout at this time.

PAO This is Skylab Control. We've had loss of signal now, after a very quiet, and uneventful Vanguard pass. And we do not reacquire at Goldstone for 1 hour and 5 minutes, During which time I expect flight controllers out here will take the opportunity of this extended break to get some lunch. The crew also scheduled to eat in somewhat staggered shifts during approximately the same period of time. This afternoon, Science Pilot Joe Kerwin and Pilot Paul Weitz are scheduled to perform medical experiments M092 and M171, both of which are concerned with the effects of long-term space flight on the cardiovascular system and will be looking in particularly at any deconditioning that may have occurred. At 17 hours 57 minutes Greenwich mean time, this is Skylab Control, Houston.

END OF TAPE

SL-II MC-716/1
Time: 13:59 CDT, 15:18:59 GMT
6/8/73

PAO This is Skylab Control. We're about a minute and a half now from regaining radio contact with Skylab, after more than an hour of being out of contact, and we'll be regaining contact through the Goldstone Tracking Station for about an 8-minute stateside pass.

CC Skylab, Houston; AOS over Goldstone for the next 5 minutes.

SC You're breaking up, Crip. Where are we?

CC Roger. You're over Goldstone now for about the next 5 minutes. Actually, you're just coming down off the Pacific Coast.

SC How do you read, Houston?

SC How do you read, Houston?

CC Loud and clear now, Paul. How me?

SC And we read you loud and clear.

CC Okay. We're at Goldstone now. Got about 5 minutes. Actually, we're just going down the Pacific Coast.

SC Okay, Crip. Let me ask you a question. Have you got any - couple - like couple these contamination DPOs or something. There's - probably get a few of those today if you want to send some times up (garble) valve, whatever they want them on the windows.

CC Okay; we'll take a look at it. If - see if we can get some in.

SC Crip, we're also looking at getting out maybe a couple three M4873 Bravos.

CC M4873 Bravo?

SC Yeah, that's in the shopping list between days 11 and 17; so I think maybe we'll pick off - each one of us can pick off one of those - one each guy.

CC Okay, very good. Pete, I got somebody researching it, but there was a question last night about these ATM cue cards. And it kind of looks like, right now, that basically the ones that we originally planned to have on board - the ones that weren't for the powerdown situation, will be good with perhaps one small modification. You guys still have those available to you?

SC Yeah.

CC Okay. We're still looking at it right now, and I'd like to talk about it down here a little bit more. But basically it sounds like if you eliminate the bit about inhibiting the CMG AUTO RESET and then reenabling it on the evening and in the morning, that those cue cards are still good. And you might ponder whether you'd like to just basically use those.

SC (Garble) target for the SPT. Gee, I'm not sure we launched with those.

CC I'm not sure you did either - but, I'm not sure you did either, and I got a checklist looking into it.

SC Yeah, I thought - I thought you meant the ones that we started scratching on after we got up here. And I gather you (garble) the weight situation.

CC Yeah, I meant the original ones. I got my checklist people looking into to find out whether you really had them on board or not.
SC Hey, Crip. Can I use the DAS yet?
CC Say again, Paul.
SC Can I use the DAS on the ATM?
CC You're GO on the DAS. It's still yours.
SC Okay, I just got ATM light which I think is star tracker (garble) I just wanted to look at it.
CC That's affirmative. That's exactly what you've got.
SC How far up to get rid of the light, anyway - why, you guys can get rid of the light for me.
CC Do you want us to do it, or do you want to do it?
SC No, I'll do it. Also, Crip, on the shopping list items, 124872 Bravo, we can do that around the dinner table tonight probably. And what we get done, we'll call into you this evening.
CC Okay. Real fine. Just give us that evening status report. It'll be fine, I believe.
SC Okay, and I gather you ought to be able to ship up tomorrow's Flight Plan fairly early.
CC We would - We'll do our best.
SC That was a cagey answer. Might give you a good dot for that one.
CC Roger. We're 1 minute to LOS now; we'll see you again over Vanguard at 19:22 - 19:22. And we'll be doing a recorder dump over Vanguard.
SC Hey, Crip, I got a word on SS009.
CC Go.
SC It showed up here in the star list at the it started. (garble) advertised name of 0106 - at about 59. At about 59 - and just about 59 the thing had just gone CLOSED, which seems like a short time before going OPEN again, for what that's worth.
CC Paul, we copied that it had closed at 000 - Correction, 0059.
SC That's right.
CC Okay
PAO This is Skylab Control. We've had loss of signal now through Goldstone; about 16 minutes away from re-acquiring through the Tracking Ship Vanguard. The secondary coolant loop remains stable. The primary loop through the air-lock module is not in operation, and remains - rather, there's still no change in the status of that loop. The secondary loop continues to control the coolant temperature at around 40 degrees Fahrenheit. The desired level is about 47. There is no serious concern - in fact, no firm indication that there is any problem with the secondary loop. One of the things considered is that there simply is not enough heat load within the system at this point to bring the temperature up to the desired 47 degrees.

SL-II MC-716/3
Time: 13:59 CDT, 15:18:59 GMT
6/8/73

And there also remains the possibility that the mixing valve within that loop is, for some reason, allowing too much flow to the radiators and not mixing properly, and therefore, controlling the temperature a bit on the low side. But, again, no undue concern about the secondary loop. And it has remained stable now since last night. Here in Mission Control several teams are working on the coolant loop problem. There are also teams at Marshall Space Flight Center and at several contractor plants looking into the problem. And we're giving priority to processing that data that relates to the coolant loops. At 19 hours 8 minutes, this is Skylab Control, Houston.

END OF TAPE

SL-II MC-717/1
Time: 14:21 CDT, 15:19:21 GMT
6/8/73

PAO This is Skylab Control, Houston, at 19 hours 21 minutes Greenwich mean time. The Skylab space station is nearing the end of the 362nd revolution. We expect to acquire radio transmission with the crew through the tracking ship Vanguard in roughly 50 seconds. We'll stand by for air-to-ground.

CC Skylab, Houston. We're AOS over the Vanguard for the next 10 minutes.

SC Roger, Crip. Say, I need you to do a favor for me.

CC Will try.

SC Okay, I've got the - my class at Princeton's 20th reunion, this weekend, I think, if I'm not mistaken. I'd like to send a telegram to The President of the Class of 1953, Princeton University, 1953 Reunion Headquarters. Tell him, "I'm sorry I can't make it: I'm out of town on business." Sign it "Pete Conrad." I'll pay you when I get down.

CC Okay. I'll try to get that out. And I've got a small chore for somebody, if he's available, to - we want to take up a little bit more of the load with the PCGs; so I need somebody to go up to panel 206 to do a little procedure for me.

SC Okay, check, Bob. I'm on my way up there right now.

SC Hey, Bob, on the primary primer on MOLE SIEVE A?

CC Roger.

SC Okay, I turned it on, and it didn't do anything for 7 minutes. At the end of 7 minutes, it went A to DESORB, B to ABSORB and has been cycling ever since and is still on the line.

CC Okay, we copy, and we can go ahead and leave that one on the line.

SC Okay, Crip, go ahead.

CC Okay, Pete. On panel 206, we'd like you to take the REG ADJUSTMENT knobs, turn them clockwise, and monitor under BUS AMPS ATM. And what we want to do is move the reading approximately 10 amps on both buses, toward the ATM.

SC Okay. Now BUS 2 on the ATM is delivering zero, and BUS 1 on the ATM is delivering about 7 amps to the workshop; so I'll go ahead and keep them respectively together and move 1 to where it feeds about 23 to the ATM and then on BUS 2 to the ATM. Is that right?

CC That's affirm.

SC Okay, Crip, there is - ATM BUS 1 is reading - is getting 2 amps from the workshop; BUS 2 is getting (garble) amps from the workshop. PCG 1 total is running 43 amps,

and 2 is running 22 amps. That looks very good.
CC Okay. It's kind of nice to see the PCGs carrying their share of the load.
SC Yes. Is that it?
CC That should do it. Thank you very much, Pete.
SC Okay.
CC Skylab, Houston. Per your request regarding cleaning windows, if that's still applicable, our recommendation is to use one of your utensil - or use as many as required of your utensil wet wipes.
SC Aye-aye, will report back.
CC Okay, if that doesn't work, our next suggested solution is that you use your lens cleaning kit and F524, that's Foxtrot 524, and per the procedures in that.
SC Okay, that's good for (garble), huh?
SC Hey, Houston, have you decided yet whether we can turn the wardroom window heater on to get rid of the dewey ice crystals?
CC Stand by on that one, Joe.
SC Yes.
SC Hey, if you give us an okay to use the heater, tell us what you want us to do with the wardroom window vent valve.
CC Okay.
CC Okay, Skylab, you're GO on turning on the wardroom window heater; we would like you to leave the valve closed.
SC Vent closed, heater on. Roger.
CC Okey, dokey.
CC Skylab, Houston. We're 1 minute until LOS. Next pass is at Hawaii at 20:31 - 20, 31.
SC Roger. See you then.
PAO The Skylab space station apparently has passed out of range of the tracking ship, Vanguard. We expect to reacquire in approximately 58 minutes. Over the Hawaii tracking station at 19 hours 33 minutes Greenwich mean time, this is Skylab Control.

END OF TAPE

SL-II MC-718/1
Time: 15:29 CDT, 15:20:29 GMT
6/8/73

PAO This is Skylab Control, Houston. At 20 hours 29 minutes Greenwich mean time. We just got a call from the Warbler telling us that the crew will be in touch with the ground over the Hawaii tracking station in approximately 1 minute, more or less. At that time we should have about 8 minutes or so of air-to-ground, with the crew. We'll stand by for a call.

CC Skylab, Houston. We're AOS over Hawaii for about the next 8 minutes. And Skylab, we show that your not using your recorders at this time, and we would like to go ahead and dump, we've got that progressed so we'll be using experiment recorder.

CDR Okay. There's is between 91 and 92 and 171 if you want to go ahead and dump it.

CC Okay, we're in the process of doing that, Pete, and that's about where we figured it'd be. While I've got you here, can I ask you a question, please, sir?

CDR Sure.

CC Okay, we would like to take you up on your offer of picking up a few items today to do some due point only measurements with the C02 due point monitor. At the locations stated on page 2-112 of your Switch Systems Checklist.

CDR 2-112 of the due point measurements, okay.

CC Yeah, that is the location, it's 2-110 and 111, sort of go over the item itself. But what we want is due point only.

CDR That makes sense. What we're going to do, Crip, is check out, just a second. We'll pick up M4873B for the CDR, SPT, and PLT and we'll also pick up M4872 Bravo, for every bit of conversation, okay? That will take care of those mid day 487 (garble).

CC Roger, we copy that.

CDR Okay. Yeah, and also the PLT would like to know how the OWS hatch leakage, was during the EVA yesterday'

CC We had no leak. Either you guys fixed it, or it fixed itself.

CDR Golly, Pete, (garble).

CC Yeah, just little flapper working for us, huh?

CDR I don't they made that good a deal, so it may have fixed itself.

CC Yeah, John, oh.

CC Skylab, Houston. We finished dumping the recorder and it's yours again.

SPT Okay, Houston.

END OF TAPE

SL-II MC-719/1
Time: 15:34 CDT, 15:20:34 GMT
6/8/73

PLT Okay, Houston.

CC Skylab, Houston, we're 30 seconds from LOS. We'll see you again over the Vanguard at 21:00, 21:00. And we will be doing a recorder dump at that point also.

CDR Okay.

PAO Apparently we've had a loss of signal with the Skylab space station as it moved beyond the range of the Hawaii tracking station. According to the flight plan, the - two of the crewmen were doing the M092 lower body negative pressure and the M171 metabolic activities experiments with Pilot Paul Weitz as the subject in this case, and with Doctor Joseph Kerwin as the observer. A reminder that there will be a Science Status Briefing with NASA Astronaut Robert Parker, who is the mission's scientist, participating. And that briefing is scheduled to start at approximately 4:15 p.m. central daylight time at the news center briefing room at the Johnson Space Center. At 20 hours 41 minutes Greenwich mean time this is Skylab Control.

END OF TAPE

SL-II MC-720/1
Time: 15:58 CDT 15:20:58 GMT
6/8/73

PAO This is Skylab Control, Houston. At 20 hours 58 minutes Greenwich mean time. The Skylab space station is about a minute away from acquistion at the Vanguard site. We'll stand by for any radio transmissions that will take place during that pass of approximately 9-1/2 minutes.

CC Skylab, Houston. We're AOS over the Vanguard for the next 9 minutes, for the next 9 minutes. And we will be doing a data voice recorder dump.

CDR Okay Houston. And on this CO2 2 point temperature monitor, it's belly up in all modes. It reads 72 wherever you go on the temp gauge no matter how long you pump it. And it reads 74 on the dew point no matter where you go and how long you pump it.

CC Roger, copy, Pete.

CDR Sorry about that.

CC CDR, Houston. We were discussing the ATM cue card earlier. According to the information we have, those the ones for nominal power operation should have been stowed in your flight data file bag in the command module when you launched, as well as the one for reduce power.

CDR (garble)

CC I'm afraid I didn't copy any of that. I was getting a lot of feedback or noise in the background.

CDR That was the PLT's bicycle riding music in the background. Well, I've got the transfer check right here, just let me look at it.

CC Okey doke.

END OF TAPE

CDR Okay, Crip. I don't find anything like that in the transfer bag. I couldn't do that to the bag that it was in. It was in the Command Module, and if we transfered it over they'd had all the cue cards for air to what they called PSS transfer.

CC That's where it should have been, Pete. Understand you don't have it. Okay. We'll look into it.

CDR Okay, let me look through the Command Module and look, I mean up to the ATM and look at the cards up there.

CC Okay, there's really no big rush on it. But, I guess you might just tell Rusty we'll solve his cue card problem, if we guys can find out about it.

CDR Hey, I've got a card here that (garble) dated 5-21-73 which is a normal Sun side prep power down for operation next pass. The flare cue card, and on the back is the ATM operate EREP, and it's written in in red ink, it's just a power card. With a dark side prep post EREP. Doesn't really look too much different than what we had.

CC Okay, for one that is marked in red. It was the reduce power card.

CDR Okay, dated 5-21. Do you think the other ones are laying around here somewhere? (garble) And we got other unattended ops with red scratched in there. It's reduced power cards. 533.

CC What we have basically done, was supposedly, we launched two sets of cards. The ones for the reduced power, we had written in - in it red ink, reduced power cards.

(garble)

CC Okay, and we had identified the nominal power cards, if there was any doubt, with red ink that said nominal power card.

CDR Okay, let me look for them.

CC Okay, I wouldn't take up too much time, Pete, if it looks like it's a problem, we can just teleprinter it up to you.

CDR I found them, hold it.

CC And CDR -

CDR I got them, I got them.

CC You got them, great. Okay we're gonna - It looks like with a couple of minor mods to that thing - to those cards, we can go ahead and use that, and it looks like it might be a lot easier to use than a cue card - or rather than a teleprinter message that we had sent up. I'll tell you what. Let us take a look at it

SL-II MC-721/2
Time: 16:03 CDT 15:21:03 GMT
6/7/73

and we'll talk to you about it later to show you what the changes would be.

CDR Okay, let me - I do see ATM nominal operation 33073 with a red nominal power card, then I have an unattended ops card, which has quite a few little scratches and goodies and I finally wind up 5/1/73 is the date of that one.

CC That's it. That's the one. While I've got you here, we need to change that PCG output on panel 206 once more. We want to reduce by 5 amps the output from the PCGs.

CDR (garble) the ATM?

CC No, we want to go back toward the transfer BUS. Five amps on BUS 1 and 2.

[illegible] Wait a minute. What do you want me to do, feed more to the ATM or take more from the ATM?

CC Take more from the ATM.

CDR Okay, that looks like BUS 1 ATM and cb 2 transfer 2 amps at BUS 2 and taking from transfer about 2 amps. That looks like about zero across the board total.

CC Okay. We copy.

CC We're about to go LOS here in about 30 seconds. We'll see you again at Hawaii at 22:07. 22:07.

CDR Okay.

CC I'm watching. Here we go.

PAO We have indication that the Skylab space station has gone over the hill at the Vanguard tracking site. Next acquisition will be at Hawaii. On rev 364 in about 56 minutes. A reminder that at 4:15 p. m. central daylight time, at the News Center briefing room, Johnson Space Center there will be a science status briefing, involving NASA astronaut Robert Parker, who also has the title of Mission Scientist. At 21 hours 10 minutes GMT, this is Skylab Control.

END OF TAPE

SL-II MC-722/1
Time: 16:22 CDT, 15:21:22 GMT
6/8/73

PAO This is Skylab Control, Houston, 21 hours 22 minutes Greenwich mean time with a short announcement that the Science Status Briefing involving NASA Astronaut Robert Parker is about to begin in building 1. That's in the news center briefing room, building number 1. At 21 hours 23 minutes Greenwich mean time, this is Skylab Control.

END OF TAPE

SL-II MO-783/1
Time: 17:03 CDT 15:22:05 GMT
6/8/73

PAO This is Skylab Control Houston at 22 hours 5 minutes Greenwich mean time, awaiting communication with the Skylab space station as it enters the area of the Hawaii tracking station. We expect to have about 9 plus minutes of air to ground. During the press conference that we had there was no transmission from the spacecraft, as they were out of communication range of any of the tracking stations. While we're standing by for the radio communications with Skylab.

CC Skylab, Houston. We're AOS over Hawaii for the next 9 minutes.

SC Roger.

CC Okay, got a few items I'd like to discuss. First is the startracker is unlocked due to a large stub angle we did about the Z, and I've got some new gimbal angles I'd like to give you and when you get a chance you can go see if you can get a lock on.

SC Wait 1.

SPT Go ahead, Houston,

CC Rog. Inner gimble is plus 0088. Outer gimble is plus 1466.

SPT Okay

CC And Joe, we would like to see if it would be possible during that ATM daylight cycle 225, you got coming up this evening if you could put that TV on the VTR and we'll dump it from the ground.

SPT Roger.

CC Okey-Doke, and I would also like to talk about this ATM cue card situation with somebody, if we got time.

SPT Okay, Stand by 1.

SPT Go ahead, Crip.

CC Okay, Joe. Do you have the cue cards that Pete found awhile ago. The nominal power cue cards.

SPT No, I expect they're up at the ATM. Want me to go get them?

CC Okay, it might make it easier if you - Do you also - if you had available your activation checklist. And where it talked about ATM C&D activation.

SPT Okay. Stand by.

CDR He's on his way up, Crip.

CC Okay, thank you, Pete.

CC By the way, CDR, we're planning on, tomorrow, it'll probably be tomorrow afternoon, sending you a message on exactly what the status is with the airlock module coolant loops and what we plan on doing about it. I can give you as much as we know right now, if you'd like, or you can wait until then.

SL-II MC-723/2
Time: 17:05 CMT 15:22:03 GMT
6/7/73

CDR All right, give me a little summary.
CC Okay, I think I told you yesterday evening that the primary coolant loop, that TCV Bravo valve was hung up in the full-cold position. And that's really what caused SUS 1 to freeze up on us, and why we couldn't use it yesterday. Was that all clear to you yet guys.
CDR Yes.
CC Okay, and it would appear that on the secondary loop that that same valve or the corresponding valve TCV-B is also diverted toward the cold position, but not as much as it is in the primary loop. But --

END OF TAPE

SL-II MC-724/1
Time: 17:41 CDT 15:22:11 GMT
6/8/73

CC Pete, B is also diverted toward the cold position, but not as much as it is in the primary loop. But, with the load we've got on the secondary loop right now, we appear to be holding our own. And the question is what do we do about it and how we go back to when we're using primary. And those are the things the guys are working over right now.
CDR Okay.
CC Okay and that is really about as much information as I can give you on it currently. And we'll be able to talk a little more about it tomorrow.
CDR What kind of valves are those. Are those the old Gemini valves that run on B flat or are they mechanic electrical valves?
CC The (garble) are B flex valves.
CDR (garble) valves, heavens to Betsy. We ought to be able to pick up the bernatherm or the exporter 2 around here some place.
CDR We can always send the flight Bs up with the next flight.
CC I'm sure that Allan would like to be able to do that.
FLT Surely we can fix it with the EPA.
CC You guys get where you like those things.
CC Did you find the cards there, Joe?
CC Somebody from the back room tells me they were even thinking about that. (garble) I think.
SPT Okay, I've got a ATM nominal pass, and an EREP, which is the power down for EREP and the dark side prep post EREP. I also have the flares prep from unhibited, and the unattended obs dark side prep. These two cards are dated 3-30 and 5-1 respectively.
CC Okay.
SPT (garble) activation checklist and you can tell me what page.
CC Okay, why don't you go to page 2-39. And while you're doing that, I'll give you a brief summary. Really all we're going to tell you to do is go back to a nominal power situation on your ATM C and D. That is you can go back to operating on your ILCA bus 1. And you can use variable lighting and so forth. And this is just the switch configuration for it in your activation checklist.
SPT Okay, so can I perform page 2-39?
CC That's affirm. Well now we - I don't think we're ready to talk about the, nobody talked about the radio noise voice monitor. (garble) What we're talking

is the ATM Cand D console power activation portion down through, well, really all you have to do is take it to if you get interval switch to variable. And that is ignore the inked in part.

SPT Yeah. Okay, I copy that.

CC Okay, Joe. Now on your cue card, the only adjustment we have to make is on the unattended obs. You got that one handy? Where we have 82A under the power down, where we have 82A, we want to leave that one in MODE KINE VICEAUTO 2.

SPT Okay.

CC Okay and we want to eliminate the reference at the top of the same to INHIBITING the CMG AUTO RESET, and then at the bottom where we ENABLE it again. We're still going to leave that thing basically INHIBITED all the time.

SPT Okay.

CC Okay. And just to be doubly sure, to the left on the updated obs side of the card to the left of it about in the middle of it, it should have written in ink nominal power card. That's the one you have. Is that correct?

SPT In red ink it has that written on it.

CC Okay, that's the one we're talking about. Okay, you can take those 2 cards and I guess you can hide the others I wouldn't advise throwing them away, but I'd hide them some place, and use those. Now if that still appears to be too messed up we can always send you a teleprinter message if you so desire. But one other item is that you have a star acquisition and an EREP maneuver cue card that was down in the workshop in one of the 700 lockers and it is for a nominal power situation. And you can use it in stead of that star acquisition reduce power card.

SPT Okay. I didn't even bring it down because we don't use it much.

CC Okay I'll - -

SPT But, we do have it.

CC Okay, I didn't think you really required it. We just sent you a your flight plan and the evening questions. And we're going to go LOS and we'll see you at Vanguard at 22:40, 22:40.

SPT All right.

PAO With Skylab having passed out of range of the Hawaii station. The crew has completed most of this day's planned activities. One more item remains at least for Paul Weitz, who is scheduled for an HK7J, which translated is a hot shower. Earlier in the day, the other 2 crewmen

took a hot shower. Later this evening, the crew will engage in a presleep tasks with Science Pilot Kerwin additionally spending about an hour at the Apollo Telescope Mount. Vanguard is the next station in about 23 minutes. At 22 hours 18 minutes Greenwich mean time, this is Skylab Control.

END OF TAPE

SL-II MC-725/1
Time: 17:37 CDT 15:22:37 GMT
6/7/73

PAO Okay, this is Skylab Control at 22 hours 37 minutes Greenwich mean time. The warbler has just advised us that we'll be coming up on Vanguard shortly. We are planning a change of shift briefing with the off-going Flight Director Milton Windler in the News Center briefing room at approximately 6:15 p. m. central daylight time. And we'll now stand by for air to ground.

CC Skylab, Houston. We're AOS over Vanguard for about the next 7 minutes.

CDR Okay, Crip, and I've got the EVA questions, 1 Alpha Bravo on B channel for you right now, and the SPT will put his comments about 1 Alpha on there, in a few minutes, we ought to have them both down tonight.

CC Okay, appreciate that, Pete, thank you.

CDR Mostly the story of Wiferdiles.

CC We sort of gathered that from some of the previous statements that you made.

CDR Don't knock success (garble)

CC Affirmative.

CDR As far as the QUAD when I put it on B channel. I couldn't see any difference in either QUAD, A or B, they looked both the same to me.

CC Okay. Copy.

CDR We put some more discription on there about what they physically looked like, and stuff like that. That's about it.

CDR I gather that there are giving consideration to the other sail deployment. Do you have any (garble) you can give me as to when you think they might reach a decision on that.

CC I was told it would be about a week.

CDR Okay.

CDR Well, we reconfigured the poles today back into the proper locations in the packages and the Marshall sail equipment is ready to go again.

CC Okay. We copy.

CC And, Pete, you had mentioned those contamination things earlier, we finally got some computed, but they're kinda late. I can give them to you, I guess, if you want them, and you can make your choice on whether you do or not.

CDR Could you send them up on the pads or something?

CC I think we ought to be able to do that.

CDR Why don't you do that. I'm about to get in the shower. Paul just got out and Joe's playing with his medical stuff and we might be able to check it up tonight -

END OF TAPE

SL-II MC-726/1
Time: 17:42 CDT, 15:22:42 GMT
6/8/73

CC - you there?
CDR Why don't you do that, I'm about to get in the shower. Paul just got out and Joe's playing with his medical stuff and we might be able to catch up tonight cause there's sunrise and sunset times in separate windows.
CC All right. Basically two times and I guess the flight company that we'd be able to get them in on a - on the teleprinter.
CDR Okay, well, we did - we're going to have all those 487 stuff for you so when they were supposed to be scheduled in the next couple of days you can try to get down there (garble)
CC Okay. Enjoy your shower.
CDR Okay.
CDR We appreciate the day. We got some things - vehicle pretty well cleaned up again and we're back in I like tomorrow's flight plan, it's a good busy day and we're looking forward to it.
CC Okay, hope PJ doesn't mind getting up a little bit early for us.
CDR Aw, you know he's hung on that EREP.
CC I got the impression he got up and prowled around early anyhow.
CDR Yeah, he told me today that "Gee there's nothing I like better than doing all those alignments"
CC I'll bet.
CDR Well, I guess we're on the backside of the curve. Have we passed the halfway mark officially on the clock yet?
CC I was asking that myself earlier. I think we should have but let me see if I can get somebody to officially say that's true.
CC I got a Mr. Shaffer over here that assures me that we're past the half-way mark. The only question is nobody will tell me how long the mission's going to be.
CDR Okay.
CDR You mean they want us to stay longer?
CC No I don't - that's not true.
CDR We don't mind.
CC You really like it there?
CDR Yeah, it's pretty nice now that we've got all the juice back. It's even better, you know, we've got hot water in the head now and things are looking up.
CC Rog.
CC I don't if you've noticed but we've been a little slow about turning on some of the electrical stuff here and I guess it's - we're just sort of like to take it easy

on the PCG - on the batteries as we bring things up to make sure that we don't hit too hard.

CDR Oh, I figured that. There's no problem and we're watching them here and it won't put a strain on anything because (garble) nee'ing to (garble) go and everybody's getting back up and VCGC's are looking very good.

CC Okey doke.

CDR You have, in fact, - this does lighten the load right on the ATM considerably. Can you see any improvments in temperatures, charge rates and so forth on the CRBM's? - CARM's?

CC I'll have EGIL have a story for you on the Ascension pass on that. We really haven't seen it doing much different than it has. We weren't ready to over taxing it. We were cautioned not to take it down below the depth of discharge on the batteries anyhow. The next pass is at Ascension and that is 22:55 - 55.

CC Rog, and we're about - less than 30 seconds to LCS.

CDR (Garble)

PAO Next station is Ascension in about 8 minutes. At 22 hours 47 minutes, this is Skylab Control.

END OF TAPE

SL-II MC-727/1
Time: 17:54 CDT 15:22:54 GMT
6/8/73

PAO This is Skylab Control Houston at 22 hours 54 minutes Greenwich mean time. The Skylab space station is heading toward the Ascension tracking station for the next 4 or 5 minutes. We'll stand by for any air to ground we might have.

CC Skylab Houston. We're about 30 seconds from LOS. We won't see you again until Vanguard again at 00:16. 00:16.

CDR Heavens to Betsy. Okay, see you, 00:16. bye bye.

CC Bye,bye.

CC And Skylab, that will be the evening status pass. I believe we only got one question really pending on that one.

CDR Roger, the evening status report. Okay, we'll have it for you. We had 3 showers plus whatever else we got.

CC Okey doke.

PAO The Skylab space station has moved out of range of the Ascension tracking station. A reminder, the evening change of shift briefing, or press conference, has slipped 15 minutes. It is tentatively firmed up now for a new time of 6:30 p. m. central daylight time, with the off-going Flight Director Milton Windler. At revolution 365, next station contact is Vanguard at 1 hour and about 16 minutes. This is Skylab Control.

END OF TAPE

SL-II MC-726/1
Time: 18:41 CDT, 15:23:41 GMT
6/8/73

PAO This is Skylab Control, Houston 23 hours 41 minutes Greenwich mean time with an announcement that the Change-of-shift briefing should get underway in approximately four minutes or 45 minutes after the hour. Participating in the Change-of-shift briefing this evening will be the off-going Flight Director, Milton Windler. The briefing will take place in the news center briefing room, building 1. At 23 hours 42 minutes G.m.t. this is Skylab Control.

END OF TAPE

PAO This is Skylab Control at 14 minutes into the . w day, G.m.t. time. Some minute and a half away from ac.. sition at the Vanguard track'ng site. We'll just stand by for w'at we expect will be the evening status report, and any oth .' communication which will come down from the spacecraft.

CC Skylab, Houston through Vanguard 10-1/2 minutes.

CDR Hello there Hank, babe. How are you tonight?

CC Oh, pretty good, how'd your day go?

CDR Man, you're talking to three clean, sweet and smelly good guys. We've all showered and shaved and everybody's in good shape. The doctor's been digging in his medical kit and working with it and I think that he just looked at his own blood.

CC Roger.

CDR We've got the good ship all cleaned - she's all stowed, we like tomorrow's flight plan and we're ready to go.

CC Good show and we're standing by for the evening status report anytime you're ready.

CDR Okay, we're a little late eating so we haven't eaten yet, but let me give you the rest of it.

CC And (garble) we'll be clearing the alert you got on the rate gyro, the star tracker. And we'll have a star tracker pad for you by Vanguard next time around.

SPT Okay.

SPT Houston, SPT.

CC Go ahead.

SPT Earlier it was mentioned that we could put tonight's ATM television on the downlink, but I think we got the time wrong. Is that 00:55 for that pass? I think that's the only pass we've got, right?

CC That's affirmative, Joe.

SPT Okay.

CDR Okay, Hank. The CDR is going to eat everything tonight and he may even add some butter cookies, but I'll let you know later. The SPT was a good boy and ate everything today, too. And the PLT says he'll put his on B channel later. The photo report for day 159 was an M092, 171-M151. Charlie Envy is 07, 35 percent, Charlie Envy is 04. That's it for the 16 millimeter. Thirty-five millimeter: C126 frame count is 34; C134, the frame count is 22. Seventy millimeter the X06, the frame count is 074 and be advised that we had

SL-II MC-729/2
Time: 19:14 CDT, 16:00:14 GMT
6/8/73

another frame counter failure on the Hasselblad. It stopped at 70 so we are manually counting. The configuration of drawer A is: A1 X-PORTER 02, Charlie India is 05, 60 percent. Charlie - -

END OF TAPE

SL-II MC-730/1
Time: 19:20 CDT 16:00:20 GMT
6/8/73

CDR - - configuration of drawer A is A1, X-PORTER 02, Charlie India 05, 60 percent, Charlie India 01. A2 is 03, Charlie India 06, 99 percent, Charlie India 03. A3 is transporter 06, Charlie India 07, 35 percent, Charlie India 04. A4 is X-PORTER 05, Charlie India 25, 100 percent, Mike Tango 11. Let's see, just 1 second. The additions to the flight plan today were M4873 Bravo by the CDR, and M4873 Bravo by the SPT, and M4873 Bravo by the PLT, they are all on B channel. We will also give you sometime tonight on B channel an M4872 Bravo. That's the additions to the flight plan. The stowage for today was the command module 22-day transfers were also completed today. You can tell FAO the time to do that takes approximately 1 hour. The command module systems housekeeping 7-day checks were completed in the same time frame. Stowage changes, I can't think of any, but there was a couple. Oh, yes by the way, on the EVA yesterday, according to the instructions, the pitch bar from the MDA tool kit was the fastest to the BET up at the bridal end. And it so remains there to this day permanently fastened to the BET outside the vehicle, so I believe you can scratch that from the list.

CC Roger copy.

CDR Okay, that's about it Hank. Have you got any questions?

CC No questions. That was a good report Pete.

CDR Okay, as I said earlier, we're happy with tomorrow's flight plan, and we're ready to go.

CC Okay. I've got one other thing I want to throw out at you and let you be thinking about it. Since we launched 4 hours early, SL II in the morning, the landing is going to be a lot earlier. In fact it's going to come about 10 minutes after sunrise. And this obviously results in a larger than normal circadian shift, it's approximately 10 hours. And it is going to probably require 2 steps to get your workday in step with entry day. And we don't like this, steps back to back. So, what we're thinking about doing is doing about 4 hours of it on day 166, that's splash minus 7, and pick up the remainder in accordance with the flight plan. And the sequence for the undock and entry is going to be normal and a flyaround is planned. Now the sequence relative to the day-night is no problem if there is no night. We're in a BETA of 70 degrees at that time.

CDR Right, we know that. Okay, that sounds, you know just that. That doesn't pulse me too badly.

CC Okay, we'll tell them to plan it that

way and you be thinking about it. And if you guys have changes you want to recommend, we've got open ears.

CDR Okay. I think about Monday, we're going to want to talk to you about a couple of things. We're going to look at, going to think about a few things through Monday. And then I think we may want to talk to you and tell you all about a couple of things. And we'll think about reentry. Right now I don't see any big problem with that.

CC Okay.

PAO We appear to have had loss of signal with the Vanguard tracking station. But, we'll leave the line up for we'll acquire again through the Ascension site in approximately 2 minutes. The Hank that was referred to in the air to ground conversation is Capsule Communicator Henry Hartsfield, who came on as a recent change of shift briefing, replacing the off going Bob Crippen.

END OF TAPE

SL-11 MC-731/1
Time: 19:28 CDT 16:00:28 GMT
6/8/73

CC Skylab, Houston through Ascension for 10 minutes, and we'll be dumping the recorder here.
PLT Roger, permission granted.
CC Skylab, Houston. I've got a startracker pad for you.
PLT Go ahead.
CC Okay, it's Achernar. 52012, 50,000, it's available day, 40 minutes remaining to night, 16 remaining. Inner gimble 0090 that's plus. Outer plus 1683.
PLT Okay, is there any rush on that? How about- you want me to get it just after we eat?
CC No rush, if fact it won't be available until 40 minutes after day, and the pass is your med conference and we need it before the following pass?
PLT Okay.

END OF TAPE

SL-II MC-732/1
Time: 19:33 CDT, 16:00:33 GMT
6/6/73

CC CDR, Houston.
CDR Go ahead.
CC Okay, we're planning on trouble-shooting the primary coolant loop - AM coolant loop here tonight about a rev from now and we hope to have some procedures for you at Vanguard. And it would be helpful at Vanguard if you could give us the switch configuration of the primary coolant loop. We'd like to know such things as, the circuit breakers positions on the coolant loops and regulators in the panel 200. The switch is on 203 and the configuration of the panel 217. And it's not going to be extensive, there's just a few things we're going to want to try after the next Vanguard pass, probably over Canary.
PLT Hey, when do you want that dope, now?
CC Negative. Just have - sometime between now and the next Vanguard pass about an hour from now. You're next contact's about - it comes at 13:14 past the hour at Guam and that's your medical conference and then the Vanguard after that is at 154 and we're about 10 seconds from LOS now.
PLT Okay.
PAO As you perhaps heard, the flight controllers here at Skylab Control are going to do a little trouble-shooting on the airlock module primary coolant loop. They plan to do some of that at the Vanguard tracking station approximately an hour and 12 minutes from now. Prior to that time, however, we'll be in contact again with the Skylab space station as it passes over the Guam tracking site. At 41 minutes G.m.t. on day 160, this is Skylab Control.

END OF TAPE

SL-1 MC-733/1
Time: 20:12 CDT, 16:06:12 GMT
6/8/73

PAO This is Skylab Control at one hour 12 minutes Greenwich mean time, day 160. We just heard the warbler alerting us to the fact that we will be in contact with the Skylab space station through the Guam tracking site in a matter of a minute or so. We'll keep the line up for any radio transmissions between the ground and the crew.

PAO During this pass over the Guam tracking station we piled up quite a bit of dead air due to the fact that there was a medical conference which we will duly report later this evening. A look at the flight plan for mission day 16 which tomorrow, Saturday, the 9th of June, reveals that we have a rather busy day in science and medical experiments including Earth's Resources experiment program para number six. The start of that pass over the state of Washington and it will cross parts of a dozen or so states travelling in a southeasterly direction. The EREP cameras will record data directly over Omaha, Nebraska and almost directly over St. Louis, Missouri. Also the cameras will be taking data over Kentucky, Tennessee, and Georgia and out over the Atlantic Ocean heading down in a southeasterly direction. On tap is a geology study, the after effects of flooding where the Ohio River met the Mississippi and an evaluation of of strip mining in the state of Kentucky. Also, a part of a request by the U.S. Department of Interior, we'll be taking high resolution photography for mapping purposes. If the pass goes its full length it will be more than 6,000 nautical miles from the state of Washington through Brazil on the east coast near receiving. Approximately two and one half dozen sites will be active at this time. Medically, tomorrow there's another M092, lower body negative pressure experiment coupled with a M171 metabollic activity. Pete Conrad will be the subject experiment in this case with Kerwin the observer. Pilot Paul Weitz will be the subject of an M131 human vestibular function or rotating chair experiment with the Science Pilot again observing. And we've allocated some time for housekeeping for eating and for Sun watching. At one hour 28 minutes Greenwich mean time, this is Skylab Control.

END OF TAPE

SL-II MC-734/1
Time: 20:52 CDT 16:01:52 GMT
6/8/73

PAO This is Skylab Control at 1 hour 52 minutes GMT. The space station is within a minute of acquisition of signal at the Vanguard tracking site. We'll keep the line up for any air to ground.

CC Skylab, Houston, through Vanguard 10-1/2 minutes.

CDR Okay, Henry, read off the STS. You can read over the switch if you want.

CC Okay and for info, we're going be commanding on the EP spectrometer.

SPT Kind of makes your throat catch a little doesn't it?

SPT Okay, Hank, go ahead.

CC Okay, Paul, I guess we just saw panel 200 we'll start there, if you want. On the bottom left row, I guess we'd like to check the positions of all our pump controls and inverters. Are they all closed?

PLT All four of them are closed.

CC Okay, and how about on the second row RAD flow.

PLT PRI and SEC are both closed.

CC Okay.

CC Okay, while you're there take a look at 203 and I guess we want to verify that both coolant loops are in COMMAND.

PLT I verify.

CC Okay, and on panel 217 could you give us a verify on the switches over there?

PLT Okay, both pumps are off and both loops are in bypass.

CC Roger copy. And let me run over our plan here. What we're going to be doing at Canary is bring up the primary coolant loop. And we're going to marker the PCV Bravo outlet temp. If any of these temperatures drop below 35 degrees, we're going to command the primary loop down. If we're unable to command it down, then we're going to have to ask you to do that. And you'll do that by turning the primary coolant loop converter off on panel 203. And we'll give you the cue to do this. You've got to verify that the proper CB and switch configuration is there and we've all ready done that, so we don't have to worry about that.

PLT Okay.

CC The reason we're doing this is we're trying to get squared away for the next 12 hours so we don't run into another thing like we did last night. And there is no more actual requirement on your part unless we have to have you to set the loops down. And we'll be planning

on doing that at Canary.

PLT Okay, what time is that?

CC Okay, Canary is coming up after this pass, and it will be at 14.

PLT All right.

CDR Okay, Henry, we broke out 64 BTUs 8 CAL FUs and we're ready to go with 6 portable fans and anything else you guys come up with.

CC I hope it is not necessary.

CC Paul, did you get your questions and answers on the IMSS one?

PLT No.

CC That's the environmental samplers and it's on page 3215 of the IMSS checklist.

PLT (garble)

END OF TAPE

CC - turn on the IMSP 1.
CDR No.
CC That's the environmental sampling and it's on page 32-15 of the IMSS checklist.
SC Oh, thank you.
CC This data we're gonna get on the coolant loop is sort of giving us a head start on tomorrow. We'll - Whatever we find out here we'll factor into our plan tonight for really doing some serious troubleshooting tomorrow.
PLT Okay, when you gonna turn that on?
CC Okay, it won't be until the Canarys as I say, and that's still awhile away at 14.
PLT Right.
CC Have you got a minute to chat with us now?
SPT Yeah, go ahead.
CC Okay, I guess it would be better for the CDR and SPT. We been reading over this dump tape on the SAS deployment and I guess some of us were - had the question as to what really happened there when you finally cut through that bolt that - It looks like the pole and everybody kind of went for a good ride. I guess we'd like to get little more elaboration on what dynamics you went through there, with the umbilicals and all.
CDR Well, I couldn't really see my umbilical Hank. What I did, pulling on the BET when the tape broke, I took off upward, but I was tethered to the BET and I had both hands on it, and of course it went slack, and so all I started doing was hauling myself toward the A-frame. And Joe was hanging on to the BET too. I don't know where he went.
SPT Let me tell you first about Pete's umbilical. It really was no problem, because his umbilical went skipping up, skipping up, intending to take a set up there, and all the time he was working out on the beam it was trailing. It was lapped in behind him in a big arc around the corner and away from the SAS beam. So it never gave me a moments trouble. When he bounced up it just bounced up along with him. I was under the - further back, in fact, right at the corner of the SAS, heaving like a mule, and when it went slack, I just went up in the air a few feet and did a right roll of 360 degrees, and finally scrambled down under the truss work there, slowly.
CC Sounds like a fun ride. How about when you cut the bolt? I think Pete was out part way on the pole when that thing finally came through. Last night you said something about there you went through a little gyration

too.

CDR Well, what happened was is I went back behind the hinge line where I was supposed to be, and I was going to have one hand on the BAT the other hand on the pole to steady it, and I was safe in minux-X looking at the cutter. And I said okay Joe, pull on the cutter, and Joe gave two or three mighty heaves and I said "Is that it, because nothing happened" and he said "Yeah, that's - He says " I got it as tight as I can" and I wasn't that far away from it and it looked to me like the jaws had closed completely. But I thought what happened was that the jaws had closed completely and they had ripped. You know how you can do that with a tin snips or something, where the snips will actually spread and not cut the metal, but close all the way, the meta' squeezed between them. I thought that's what had happened. And that I was going to have to go out there and remove the cutter. So I said to Joe, I said "I'm going to go on out there and take a look and see what's going on". Well, at that time I got just about out to where the sissors mechanism is on the cutters, which isn't too far away from the strap, the thing let go by itself, or Joe gave one more heave, I don't know which happened, but anyhow it let go and it was just like the guys figured. The strap was in tension, and it was holding the SAS beam, and the SAS beam popped up about 6 feet, I guess, and of course, I let go of the pole, and I don't know where the pole went, but I did the same thing again. I grabbed a hold of the BET, which was now getting slack, and I started pulling for the secure end at the A-frame pulling myself back, because I did a couple free whifferdills around the lind doing something, you know, just getting back there, but nothing too bad.

SCHWEICKART Pete, when the strap let loose, did the meteoroid shield move or slide underneath the beam at that same time, or did it sort of stay there.

CDR Don't know. I'm sure, I didn't see it, see, because the beam popped up right away, and I'm sure that the meteoroid shield snapped under - let me tell you what I did. When I was out there before, hooking up the BET the first day pass, I crawled around to where I could look down around the meteoroid shield, and the - wait a minute, I got to get it from Paul. What's the name of the hinge?

SCHWEICKART That's butterfly.

PLT (garble) - oh, butterfly.

CDR The butterfly hinge was completely attacked and partially deployed. And all the way along the whole beam, and I could see that, because there was light coming through it. I'm sure that the whole meteoroid shield

now is sitting there 6 inches away where it should be, what's left of it, except for the parts that are curled up or jagged edgewise, and so forth, because the two, as you know, I'm sure the two rods, torsion rods, and the links were still on there so I ditched in them, and they ought to show the right position What do they show on telemetry?

SCHWEICKART We'll check on it.

CC Hey we're about LOS now, Pete. That was a good description and we're coming up on Ascension in 1 -

PAO During the pass just ended we had a clarification of yesterday's acrobatics in space during that EVA, which freed the solar array. And we also told the crew that we plan to bring up the primary coolant loop, and explained to them that if certain of the temperatures dropped to certain levels, why we will command the primary loop down. There's no plan at the present time to perturbate the secondary loop. We expect to acquire the spacecraft again in about 6 minutes. At 2 hours 5 minutes GMT, this is Skylab Control.

END OF TAPE

SL-II MC-736/1
Time: 21:10 CDT, 16:02:10 GMT
5/8/73

PAO This is Skylab Control, Houston, two hours 10 minutes Greenwich mean time, roughly a minute and a half from predicted acquisition of the space station through the Ascension tracking site. We expect to have coverage across Ascension, the Canaries, and the Madrid tracking station on this, the 367th, revolution. We will stand by for air-to-ground.

CC Skylab, Houston through Ascension for one and a half minutes.

PLT Okay.

PLT Hey, we're all at the - down in the ward-room putting this 487 thing on tape, so if you need me just holler and I'll ziggy on up.

CC Say again.

PLT We're all in the wardroom. If you need me in the STS for that coolant loop stuff just holler and I'll go on up.

CC Okay.

CC Skylab, Houston. We're about 30 seconds from LOS at Ascension and we may drop out and we may not. In any event the Canaries will be coming up at 14 and we're going to dump the recorder.

PLT Okay.

CC Skylab, Houston through Canaries and Madrid for 13 minutes and we're going to start commanding the coolant loops.

PLT Okay, we're all sitting here holding our breath.

END OF TAPE

SL-II MC-737/1
Time: 21:15 CDT 16:02:15 GMT
6/8/73

CC Skylab, Houston. Leave off the PRIMARY loop UP. The - all indications were the temperatures for the TCV Bravo out went right on down to 35 so we're pretty sure that valve is stuck and not modulating. And we've commanded that loop OFF again.

CDR Okay, Hank. What does that mean? Is there - has that valve gotten so cold that it can't modulate any more? Is that the problem?

CC Well, we're not quite sure on that. What we're hoping for is it may have been in some water or something in there and it may have frozen up. And our temperature indications show that the temperature is up around 52, 53. Perhaps all this had melted, and we were kind of hoping it would work. But we find that's not the case and we're not sure why it's stuck where it is.

CDR Okay. I guess you've got to think about it a little longer, huh?

CC Roger. We've got this data point now and we don't have to consider that water thing any more. And so tonight we're going to smoke it over and see if we can't come up with some sort of a plan for tomorrow to do a little troubleshooting.

CDR Okay, very good. The primary loop is secure now. Is that correct?

CC That is affirmative.

CDR Okay, now you want us to keep running the secondary loop at plus 2. Is that right?

CC That's affirmative.

CDR Now, do you think plus 1 is still frozen?

CC We don't think it's frozen, Pete, but we can't tell for sure.

CDR Well how about letting us give it a quick check, and see if we get an EVA warning light. We didn't get any before when it was frozen. Let's see if it will flow, Okay?

CC Stand by 1.

CC Okay, you got a GO on that Pete.

CDR Okay, because we can hear the pumps running, it just wasn't going any where. So we'll give it a try right now.

CC Okay, we'll be watching.

CDR Hey, Hank, it didn't work. We can hear both pumps run, but we don't get any EVA warning light. It's obviously not flowing.

CC Well, we were showing flow down here, Pete.

SL-II MC-737/2
Time: 21:15 CDT 16:02:15 GMT
6/8/73

CDR Well, I don't understand, Hank, because the other day when I ran the housekeeping test on it every time you turn the pump on you activate the Delta P switch. And I'd get to EVI - -

END OF TAPE

CDR - when I ran the housekeeping test on it everytime you turn a pump on you activate the Delta P switch and I'd get to EV-1 warning light until it came up the pressure. Now we don't get it and we haven't gotten since it wouldn't - we got no flow the other day when we were trying an EVA and the crewmen had no flow and we've never gotten a warning light since then.

CC Copy. According to what we saw in the flow then - it looked you may have tried both pumps. Is that correct?

CDR Yeah, that's right, primary and we got no warning light and then I went to secondary and I got no warning light.

CC Our indications down here did show flow although I'm not so sure they got up to full spec value.

CDR Well, here we'll go turn one of them on right now and you look at it for a minute. We'll let it run for a second.

CC Okay.

CDR Okay, that's the SUS-1 primary pump.

CC Okay, we're showing about 250 pounds an hour flow.

CDR Okay, well let me just - can I turn off SUS-2 for a second and then turn it back on again.

CC Hold up on that.

CC I guess we want to leave SUS-2 alone since it's running okay.

CDR All right.

CDR Hey, I just - I don't understand if SUS-1 is FLOW why we didn't get the momentary trip on the flow sensor on the EV-1 caution and warning.

CC Okay, I see you've shut it down, is that correct?

CDR Say again?

CC You've already shut system 1 down, is that right?

CDR Yeah, but like I said, I don't understand the other day when I did the checkouts on it the caution and warning was working fine. Now, the output's LSU on there or I wouldn't know what we were really getting flow through the whole loop of not.

CC Okay, we'll - let us think about that one awhile.

CDR Okay, it could be it's - I mean that's a double SUS - you know the thing folds up the other day and the caution and warning went out. Now maybe if it really did freeze up it did something to that transducer for all I

know.

CDR And I don't remember last night when we turned on SUS 2 whether we got the low flow warning indication as it came up to me or not. I don't remember.

CC Hey, while you're up that way why don't we get you to hit a couple of switches on the ATM.

CDR Have at it.

CC We need the 52 main power to STANDBY, and we'd like to the monitor - the TV monitor-1 ON.

CDR Okay, TV MON-1 power is ON and 52 is in STANDBY. Anything else?

CC That ought to do it. That cleans up for unattended.

PLT Ed, shall we change our unattended OPS checklist to reflect this?

CC I think it does read that way now. We're - this is original normal power cue card that you flew up with

PLT I'll check it again. I went through it today and wound up with those - I ignored the cross-throughs and write ins on it which didn't say to leave one monitor powered up. I didn't have any idea we'd gotten back to that mode of operation. I didn't think you'd want to leave a monitor up all night.

CC We want it to run just like that card, Joe with the mark-ups on it when you went up - when you took it with you.

SPT You guys going to check that EV-1 television during the night?

CC We probably will.

SPT God loves you.

CDR Okay, Hank, I'm glad you said that cause I just put the 132 panels (garble) to (garble) mode 1.

CC Roger, that's correct.

CC And we would like you to if it's convenient to get the star tracker up so we can look at it at Guam and we're about 20 seconds from LOS. And Guam will be coming up at 53.

CC Okay, the star won't be up until about 40 minutes of day.

PAO During this pass over Ascension, the Canary Islands and the Madrid station there was a trouble-shooting attempt to induce the primary coolant loop to operate satisfactorily, but apparently there was no joy in that, and so the ground commanded that the primary loop be turned off while we go back to the drawing board, so to speak, and think what we can do next. EGIL, the General Instrumentation and Life Support Systems Engineer believes that the flow transducer

SL-II MC-738/3
Time: 21:21 CDT, 16:02:21 GMT
6/8/73

has failed at some time or other, valve is stuck, stopped modulating, so we will go back and do a little thinking. At two hours 29 minutes Greenwich mean time, this is Skylab Control.

END OF TAPE

SL-II MC-739/1
Time: 21:36 CDT 16:02:36 GMT
6/8/73

PAO This is Skylab Control at 2 hours 36 minutes Greenwich mean time. With the evening medical bulletin on the status of the crew as reported by Dr. Charles E. Rose, who is quoted thusly: "The Skylab crew in excellent condition following a modified off day working schedule. The crew continues to eat well and has an adaquate fluid intake. They did not report any health problems. The Science Pilot, Dr. Joseph Kerwin, performed a blood count on himself today. He reported that his hemoglobin and differential flight count were similar to his preflight tests. He had no problems operating the slide strainer and microscope under the weightless condition. The Commander is continuing to perform his personal exercise at high work loads with no observed problems." At 2 hours 37 minutes, this is Skylab Control.

END OF TAPE

SL-II MC-740/1
Time: 21:50 CDT 16:02:50 GMT
6/8/73

PAO This is Skylab Control at 2 hours 50 minutes, Greenwich mean time. The space station is approximately a minute away from Acquisition at the Guam tracking site. On what will probably be the last pass before the crew goes to sleep for the night. We'll stand by for any radio communication with the crew during this pass, which last approximately 6-1/2 to 7 minutes.

CC Skylab, Houston, through Guam for 6-1/2 minutes.

CDR Roger.

CC We're real slow down here, but it's finally dawned on us the reason that caution and warning wasn't working is that the caution and warning isn't activated through panel 217. It's only from the panels and the locks.

PLT Yeah, we started it through the lock panel also.

CC Oh, and it still didn't do it.

PLT Right.

CC Back to the drawing board.

PLT Yeah, it sounded good for awhile.

SPT Well, you gave me one. I didn't know that panel 217 didn't activate the caution and warning.

CC Skylab, Houston. We got a few little news items here we could read up to you if you want to listen to them.

CDR Yeah, go ahead. First I put on B channel that the CDR couldn't stand it and he ate two cans of butter cookies, with his vanilla ice cream(garble)

CC Roger. Copy.

CDR We're listening.

CC Okay. Chris sends his regards.

CDR very good.

CC First item. Texas wheat crop is expected to be the third largest in history, but it's in danger because of our fuel crisis. It's predicted to reach 83 million bushels and the crop is dependant on power combines and trucks that need fuel and diesel oil to operate. On the brighter side, Americans may be cooking with Russian gas in about 6 years if an agreement between U.S.- two U.S. farms and the Soviet government overcome several obstacles, economic and political that are still pending. The two farms signed a letter of intent for the Soviet Ministry of Foreign Trade to import about 10 billion of natural gas over a 25 year period. President Nixon believes that the American genius can solve the country's problems, at home and in the world --

END OF TAPE

SL-II MC-741/1
Time: 21:45 CDT, 16:02:54 GMT
6/8/73

CC - - over a 25 year period. President Nixon believes that the American genius can solve the country's problems at home and in the world, if people can concentrate on what's right rather than what is wrong with the country. The president spoke at commencement exercises at Florida Tech down in Orlando, and he said " I say Americans when they have a problem will solve it because we have a genius to solve it, the same genius that built America and made us what we are today." Okay, and the senate has approved a bill that will maintain high farm income without harming consumers. Included in the bill was a provision to limit subsidies to large scale farmers. Senator Sam Ervin Chairman of the Senate Select Watergate Committee has drafted a resolution that will expand the scope of the panel's mandates. The proposed resolution asks for an investigation of activities concerning the 1971 burglary of Daniel Ellsburg psychiatrist's office. The South Vietnamese government has indicated that it is ready to sign a joint appeal calling for an antihostilities in Vietnam. General Francisco Franco, ruler of Spain for the past 35 years, will turn over part of his duties to a fast rising Admiral in the Spanish Navy. Franco, now 80, is not completely retired only slowing down. A new kind of garden is beginning to appear in Berkeley California, called gorilla gardening, and consists of growing vegetable crops in front yards to try and combat the high cost of supermarket produce. The military government of Greece has announced that a presidential plebiscite will be held at the end of July. President Premier Georges Papadopoulos will be the only candidate. The second round of the 150,000 dollar Philadelphia golf classic was led by Jim Barber, who is sponsored by his grandmother. Barber led a large field with a 2 round 65, 7 under par. Secretariate, winner of 2/3 of the racing world's triple crown is pitted against a small field in tomorrow's Belmont Stakes. The record smashing thouroughbred is favored to win the hard to win race. Okay, the latest score or Houston is Astros ahead 4 to 3 in the 9th, and it's not over yet. Yesterday's scores, let's see I believe they had a Dogers fan and a Cubs fan and onboard. And they played each other , and the Dogers came out on top 4 to nothing.

PLT You don't have to give these scores.

CDR What place is the Astros in?

CC Okay, Astros are 6-1/2 out now. And Chris just tells me that the Cubs just won tonight 6 to 5.

PLT How are the Cubs doing in the NLE?

CC Okay, they're 5-1/2 out in front of Pittsburg.

SL-II MC-741/2
Time: 21:45 CDT, 16:02:54 GMT
5/8/73

PLT Oh, isn't that nice.
CC And for the CDR's information we want to relay greetings and so on. And I think that's all the news for tonight. See you around Henry.
CC Good night Rusty.
CDR Say Rusty did you get my last comment about the damping in the water tank. That's would be the biggest thing that I could see is the difference out there.
CC Yeah. Okay, I got that Pete, thanks.
CDR Okay, and the other thing is that EVA station advanced station is super. It's so easy to work in there. It's unbelievable, you guys did great work designing it.
CC You mean even for a little guy you can reach all those things huh?
CDR Even for a little guy. I didn't complain about you one time.
PLT Hey I second that for the whole ATM run. Running up to the front end was like scampering up the stairs after being out there with that 25 foot pole in my hand. It was like coming home. It was easy as pie.
CC Okay, and for the job you did yesterday, everybody down here has been saying nothing but super all the time.
PLT Hey, there is somebody else who should be given a little accolade, and I don't usually give manufacturers commercials, but I think that the International Latex Corporation who built the suit, and the Garrett people, who built the PCU, we owe them a big vote of thanks for a super piece of hardware.
CC I think it was very notable yesterday that we never even thought twice about that. It was all just like normal.
PLT That's right.
CC Okay, we're about LOS now. We'll say good night to you. Get a good night's rest, and we'll see you tomorrow.
CDR Okay, looks like a good day tomorrow. Nighty night.
PAO Well the Skylab crew got a good night from the ground. We have one more bit of news information to pass on. This through the courtesy of Dr. Charles Rohn. He pointed out that today's blood count which was performed by Dr. Joseph Kerwin on himself, was one more first. And that's added to the long list of many many firsts started by the Skylab space station. At 3 hours and 1 minute Greenwich mean time on the 367th revolution, this is Skylab Control.

END OF TAPE